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RISK – ADJUSTED HOSPITAL MORTALITY NORMS

CPHA PUBLICATIONS

1987 WORKBOOK

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PROJECT STAFF

Nancy Cauthen, Product Manager, Publications
Jeanine DeLay, Assistant Manager, Publications
Marion Morris, Senior Programmer Analyst
Lale Olson, Senior Electronic Publishing Analyst
Billie Thompson, Electronic Publishing Analyst

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PREFACE

It is often said that statistics describe people without their tears. This is especially compelling with mortality statistics; the numbers represent with impersonal finality the loss of an individual, a loved one, and a member of the human community.

We have been mindful of this in publishing the Risk-Adjusted Hospital Mortality Norms. We consider the dissemination of normative mortality data an important contribution to the political and ethical choices now facing Americans concerning access to quality medical care and increasing control over death.

EXPLANATORY NOTES

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HOW TO USE THE 1987 RISK-ADJUSTED HOSPITAL MORTALITY NORMS WORKBOOK

The 1987 Risk-Adjusted Hospital Mortality Norms Workbook is designed for the following members of the healthcare team:

- Quality assurance coordinators
- Physicians

In addition, the workbook can be purposefully applied by professionals whose roles include monitoring healthcare issues, specifically quality of care:

- PRO, HMO, and PPO quality assurance specialists
- Corporate benefit and insurance company analysts
- Healthcare policy experts

As its name implies, the publication includes practical exercises. The user needs to obtain several commonly used institution- or provider-specific data items and to perform two simple calculations to complete the workbook.

The user must obtain the number of patient discharges categorized by DRG from an institution or provider, stratified by:

1. Presence or absence of a HCFA-defined complication or comorbidity
2. Age group (<65, 65-74, and 75+)
3. Expiration status

The calculations are easily accomplished on a pocket calculator:

1. Divide the number of DRG categorized patient discharges with or without CCs, in one of the three age groups who died, by the total number of patients with those matching attributes.
2. Multiply by 100 to get the percent of patient discharges where the patient died.

The workbook is based on the premise that the collection and maintenance of large inpatient databases enables the development of healthcare industry norms, in this instance risk-adjusted mortality norms.

Users are instructed to calculate and compare institution- or provider-specific death rates to the national and regional predicted mortality norms constructed from a large nationally representative inpatient database, and refined through a new risk-adjusted mortality rate methodology, called the Risk-Adjusted Mortality Index. Comparisons allow users to identify potential problem areas, initiate further inquiries, or define the importance of mortality as an indicator for their own quality assurance programs.

The 1987 Risk-Adjusted Hospital Mortality Norms Workbook constitutes only one component or information source for a comprehensive quality assurance program. The workbook does not attempt to push an agenda or set standards for death rates for a region or the nation. The workbook has been created to help healthcare professionals more uniformly and reliably define quality of care issues through the application of mortality data, an already recognized and accessible quality measure.

MORTALITY DATA AS A QUALITY MEASUREMENT TOOL

During the last few decades, health services researchers have used mortality data as an indicator of quality of medical care. Several arguments have been advanced to support such use:

- Mortality as a data variable is one of the few quality measures that is valid, since death is perceived by many as the worst possible health outcome and prevention of death has been the major task of medical care.
- Mortality data are easily available, and unlike other potential quality measures, standardized and uniform.
- Mortality data can be collected and displayed by institution, medical specialty, or physician, enabling healthcare professionals to identify potential quality problems.
- Mortality data are accessible to healthcare consumers to evaluate care options on the criterion of quality.

At the same time, health services researchers have been very cautious in endorsing mortality data as a comprehensive tool of quality measurement. Concerns center around four issues:

1. Uneven quality of mortality data and dependence on small, nonrepresentative samples.
2. Use of inappropriate and untested mortality rate adjustment models.
3. Nonspecificity of mortality data.
4. Need to develop and integrate quality measures, in addition to mortality, to increase the efficacy of quality assurance programs.

The approach, methodology, and practical exercises available in the 1987 Risk-Adjusted Hospital Mortality Norms Workbook overcome these concerns where possible. These issues are further defined throughout these explanatory notes and integrated into a discussion of the:

- Collection, quality, and design of the database from which the mortality norms are constructed.
- Components and definitions of the CPHA risk-adjusted mortality rate model.
- Applications and limitations of the risk-adjusted mortality norms in the workbook.
- Instructions on how to complete the workbook.
- Additional user services.

DESCRIPTION OF THE DATABASE

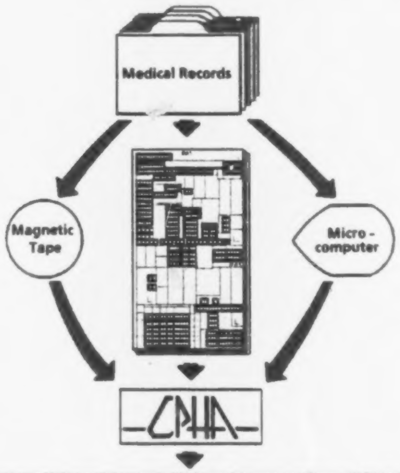
Data Collection

The data are compiled from individual patient discharge records submitted by approximately 1,050 U.S. short-term general, nonfederal hospitals participating in the Professional Activity Study (PAS) of the Commission on Professional and Hospital Activities (CPHA).

Data storage and retrieval are accomplished as follows:

1. In each participating hospital, personnel transfer demographic and clinical data from the medical record of each discharged patient via microcomputer floppy disk, magnetic tape, or paper abstract.
2. The disk, tape, or abstract is mailed to the data input center at CPHA where the data are entered into the computer system.
3. Data then undergo manual or interactive edits and flagged errors are corrected by CPHA coding and abstracting specialists as directed by contributing hospitals.
4. Hospitals continually add data stored in the computer system's permanent history file dating back as far as 1955. Participating hospitals are provided access to their own data through interactive systems, in-house computers, and paper reports. The stored aggregate data are available for policy and contract research and through publications such as the 1987 Risk-Adjusted Hospital Mortality Norms Workbook.

CPHA'S DATA COLLECTION SYSTEM



CPHA's Database is maintained for:

- Print and electronic publications, e.g., the 1987 Risk-Adjusted Hospital Mortality Norms Workbook, 1987 Length of Stay Norms.
- Contract research market analysis, forecasting, survey, and epidemiological investigations.
- Policy research on major healthcare issues, e.g., cost containment, quality of care, equal access.
- On-line access and analysis by hospitals and other health industry groups.

Data Quality

Although the hospital is ultimately responsible for the quality of its data, CPHA shares responsibility as the hospital's medical record processor. For this reason, CPHA goes to considerable length to prevent and correct errors by continually training hospital medical record personnel in coding and abstracting methods, by routinely monitoring submitted data, and by carefully checking and editing the data for errors.

Over 600 checks are performed during the micro and mainframe computer processing of each patient record to ensure reasonableness of the data. Examples of discrepancies in the data detected by the audit are: pediatric service recorded for a patient older than the specified pediatric age, cesarean section recorded with a normal delivery diagnosis, or unrecorded or invalid principal diagnosis. When illogical, invalid, or missing data are detected by the computer system edits, errors are referred back to the hospital staff for correction.

Sample Design Used to Calculate Mortality Norms

As previously mentioned, CPHA's database includes approximately 1,050 U.S. short-term general, nonfederal hospitals and discharge records for approximately 9 million patients per year. This represents about 24 percent of the annual discharges from the universe of short-term general, nonfederal hospitals in the United States.

To produce the 1987 Risk-Adjusted Hospital Mortality Norms Workbook, a nationally representative sample of two million patient discharges is drawn from CPHA's 1987 database. The sample patients are then projected to represent all patients discharged from the universe of similar hospitals.

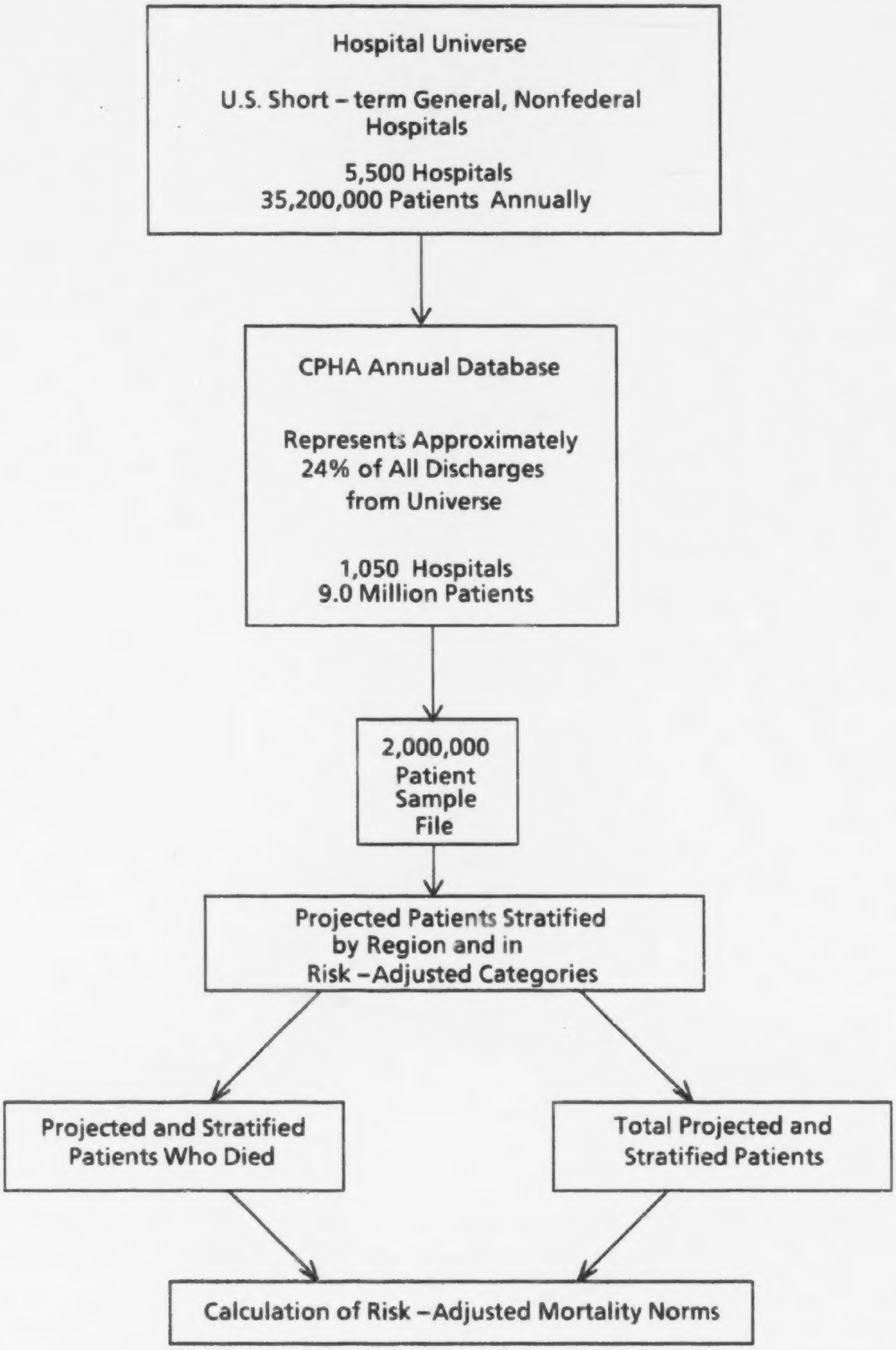
These projections are, in turn, stratified by region and risk-adjustment factors (DRG cluster, complications and comorbidities, age group) and expiration status. Then predicted death rates, i.e., norms, are calculated along with a range of error for each norm.

The diagram on the next page illustrates the sampling and stratification process.

Hospital Universe

The hospital/discharge universe is based on the facility and discharge numbers collected for the most current Annual Survey of Hospitals of the American Hospital Association (AHA). The two charts on page vii present the number of hospitals and discharges for U.S. short-term general, nonfederal hospitals by census region (4), ownership (4), and bedsize (5).

CREATION OF THE 1987 RISK-ADJUSTED HOSPITAL MORTALITY NORMS


Hospital Universe
U.S. Short – term General, Nonfederal Hospitals
5,500 Hospitals
35,200,000 Patients Annually
CPHA Annual Database
Represents Approximately 24% of All Discharges from Universe
1,050 Hospitals
9.0 Million Patients
2,000,000 Patient Sample File
Projected Patients Stratified by Region and in Risk –Adjusted Categories
Projected and Stratified Patients Who Died
Total Projected and Stratified Patients
Calculation of Risk –Adjusted Mortality Norms

UNITED STATES SHORT-TERM GENERAL, NONFEDERAL HOSPITALS BY CENSUS REGION, OWNERSHIP AND BEDSIZE

CENSUS REGION	HOSPITAL OWNERSHIP																				TOTAL
	Gov., Nonfed., In Large Cities					Gov., Nonfed., Not in Large Cities					Nongov., Not-for-Profit					Nongov., For-Profit					
	BEDSIZE					BEDSIZE					BEDSIZE					BEDSIZE					
	6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +	
NORTHWEST	–	–	6	3	10	18	11	2	1	2	166	168	258	51	67	9	6	9	–	–	789
N. CENTRAL	–	1	7	1	10	374	53	18	2	1	518	207	257	51	73	29	12	9	–	1	1624
SOUTH	2	4	9	4	14	503	100	50	9	15	317	196	204	51	69	254	196	85	12	2	2096
WEST	1	1	11	5	2	222	26	19	2	1	232	133	142	16	19	97	70	25	–	1	1034
U.S. TOTAL	3	6	33	13	36	1117	190	89	14	19	1233	704	861	169	228	389	295	128	12	4	5543

Source: The 1986 American Hospital Annual Survey of Hospitals

UNITED STATES SHORT-TERM GENERAL, NONFEDERAL HOSPITALS BY CENSUS REGION, OWNERSHIP AND BEDSIZE

CENSUS REGION	HOSPITAL OWNERSHIP																				TOTAL
	Gov., Nonfed., In Large Cities					Gov., Nonfed., Not in Large Cities					Nongov., Not-for-Profit					Nongov., For-Profit					
	BEDSIZE					BEDSIZE					BEDSIZE					BEDSIZE					
	6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +	
NORTHWEST	–	–	71,996	60,027	243,755	43,609	52,053	18,126	15,287	42,521	376,761	956,524	2,841,611	902,520	1,796,899	20,850	33,427	86,433	–	–	7,552,399
N. CENTRAL	–	1,974	76,469	18,954	240,568	472,279	254,285	179,073	29,933	37,081	805,144	1,115,446	2,817,864	846,158	1,905,281	36,603	45,498	72,831	–	31,285	8,986,705
SOUTH	2924	36,453	162,611	86,867	507,368	818,596	591,405	572,164	162,478	374,762	618,104	1,116,074	2,437,084	946,206	1,856,367	446,565	902,501	752,936	181,775	38,029	12,611,269
WEST	5223	5702	187,239	96,330	123,208	286,854	175,725	246,829	39,140	31,967	433,762	821,750	1,903,321	335,947	529,881	225,634	365,064	213,790	–	21,841	6,049,207
U.S. TOTAL	8147	44,129	498,315	262,178	1,114,899	1,621,338	1,073,468	1,016,192	246,838	486,331	2,233,771	4,009,794	9,999,880	3,030,831	6,078,408	729,652	1,346,490	1,125,990	181,775	91,154	35,199,580

Source: The 1986 American Hospital Annual Survey of Hospitals

Two Million Patient Discharge Sample Characteristics

The two million patient discharge sample is drawn quarterly in increments of approximately 500,000 discharge records. Each quarter's sample is extracted using all hospitals submitting three complete months of data for that quarter. For any given quarter, this includes approximately 500 hospitals. Hospitals included for the year do not comprise a cohort. These hospitals are distributed across all geographic regions, bedsize categories, levels of teaching status, and types of control. (These categories are defined in the following section.)

SAMPLE METHODOLOGY AND RELIABILITY

To make the two million patient discharge sample reflect the activity of the U.S. short-term general, nonfederal hospital universe, three techniques are used.

Step 1 - Stratification

First, hospitals are stratified by factors known to affect inpatient statistics. Four stratification factors are used: bedsize, ownership, teaching status, and census division.

1. **Bedsize** represents the number of beds set up and staffed for use in the hospital. The size categories are:

   6-99
   100-199
   200-399
   400-499
   500+

2. **Ownership** describes the type of organization responsible for establishing the overall operation policies of a hospital. There are four major categories:

   Government, Nonfederal, In Large Cities includes county, state, and city hospitals in any of the 50 largest U.S. cities indicated in the most recent AHA Annual Survey of Hospitals.

   Government, Nonfederal, Not in Large Cities includes all county, state, and city hospitals not in the above category.

   Nongovernment, Not-for-Profit includes church-operated and all other not-for-profit, nongovernment hospitals.

   Nongovernment, For Profit includes all investor-owned hospitals.

3. **Teaching Status** is determined by a weighted index measuring program intensity created by Phillip and Hai.[1] The index is based on programs, memberships, and affiliations approved by various bodies. The approvals incorporated in the index are:

   - Accreditation by the Joint Commission on Accreditation of Healthcare Organizations
   - Cancer Program approved by the American College of Surgeons
   - Residency approved by the American Medical Association
   - Medical School Affiliation reported by the American Medical Association
   - Hospital-controlled professional nursing school, reported by the National League for Nursing
   - Member of the Council of Teaching Hospitals of the Association of American Medical Colleges

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[1] P. Joseph Phillip and Abdul Hai, *An Index of Programs for Hospitals* (Chicago: American Hospital Association, 1976).

Based on this index, hospitals are classified by one of three teaching status groups:

Nonteaching Institution
Minor Teaching Institution
Major Teaching Institution

The statistical formula used to determine teaching status is in Appendix 1.

4. **Census Division** places the 50 states and the District of Columbia into nine geographical areas defined by the U.S. Department of Commerce, Bureau of the Census. These nine divisions and their corresponding regions are:

Region	**Division**
Northeast	New England Middle Atlantic
North Central	East North Central West North Central
South	South Atlantic East South Central West South Central
West	Mountain Pacific

State inclusions are listed in Appendix 2.

Once stratified by these factors, the hospitals are organized into a matrix. The matrix has 540 cells. This number is derived by multiplying the number of stratification groups: 5 (bedsize) x 4 (ownership) x 3 (teaching status) x 9 (census division) = 540. Each matrix cell represents a particular configuration of bedsize, ownership, teaching status, and census division. A table illustration of the matrix is displayed in Appendix 3.

Step 2 - Estimation

Of the 540 cells created by hospital stratification, only about 260 are represented by hospitals in the universe. When each of the two million patient discharge sample records is assigned to the appropriate stratification cell, about 140 of the 260 cells are filled. This leaves about 120 cells that must be estimated from the cells containing discharge records.

The estimation process utilizes a missing cell methodology designed by Richard Ament, former Senior Statistician at CPHA. This method requires "borrowing" discharge records from neighboring cells. For cells where sample data are unavailable (target cells), a potential source cell(s) is (are) identified. The source cell(s) is (are) identical to the target cell except for a single permitted shift in one of the stratification variables, or more if needed. Rules governing this borrowing process specify which shifts are permitted in order to locate source cells as similar to the target cell as possible. All qualifying source cells are drawn on to fill a particular target cell after a weight has been assigned to each.

Step 3 - Projection

In the final step, projection factors are applied to make the sample representative of the universe of discharges from U.S. short-term general, nonfederal hospitals.

A projection factor is calculated for every cell. This number is calculated as follows:

$$\text{Projection Factor for Cell X} = \frac{\text{Total discharges from the universe represented by Cell X}}{\text{Sample records assigned to Cell X}}$$

Each projection factor is multiplied by the number of actual records for a particular cell. The resulting numbers represent estimated patient discharges, the sum of which approximates total 1987 discharges from the U.S. short-term general, nonfederal hospital universe.

SAMPLE DATA QUALITY

As previously described, each patient discharge record is rigorously edited before being stored in CPHA's annual database. In addition, records in the two million patient discharge sample undergo an auditing process to eliminate uncorrected or unusual data. Any of the following conditions cause a patient discharge record to be excluded from the two million patient discharge sample and from the 1987 Risk-Adjusted Hospital Mortality Norms Workbook.

1. **Incalculable Stay**

   This includes discharges where the length of stay cannot be determined because the admission or discharge dates are absent from the patient discharge record or are illogical.

2. **Incalculable Age**

   Discharge records where the birth year or admission date is unrecorded or illogical are excluded.

3. **No Principal Diagnosis**

   Any discharge record without a principal diagnosis is excluded.

4. **Disposition Inconsistency**

   Some dispositions, e.g., alive and died, are mutually exclusive. Those patient discharge records where the disposition is inconsistent are excluded.

Refer to page xviii for a description of additional data edits performed before the mortality norms are calculated.

NOMINAL 95% CONFIDENCE LIMITS FOR ESTIMATES MADE FROM CPHA'S TWO MILLION PATIENT DISCHARGE SAMPLE

Estimated Count	Nominal 95% Confidence Limits		
100	-68%		+130%
200	-52%		+ 84%
400	-39%		+ 54%
1,000	-26%		+ 32%
2,000		+ 20%	
4,000		+ 14%	
10,000		+ 8.8%	
20,000		+ 6.2%	
40,000		+ 4.4%	
100,000		+ 2.8%	
200,000		+ 2.0%	
400,000		+ 1.4%	
1,000,000		+ 0.9%	

Concerns About Mortality Data

Data quality and the reliance on small, nonrepresentative samples are two of the concerns researchers give voice to whenever mortality data are recommended to assess quality of medical care.

First, researchers point out that decisions about quality of medical care, which may reflect on provider performance, depend on knowledge of and accuracy of mortality coding and reporting practices.

Recent studies, sponsored by the Rand Corporation, reveal widespread underreporting of hospital mortality for Medicare patients, averaging greater than 6 percent.[2] Moreover, regional variations in lengths of stay among hospitals, differences in patient discharge practices, and unequal access to home care and hospice services in communities, determine the number of reported hospital deaths. These practices, left undocumented, can lead to erroneous and distorted conclusions drawn from inaccurate data about provider performance.

Second, several of the studies pioneering the application of mortality data are based on small patient samples or represent analysis of only a few types of hospital patients.[3] As a consequence, recommendations based on these data may be less reliable if generalized across the hospital patient universe.

IMPORTANT NOTE:

Through the approach favored in this workbook, every attempt is made to answer apprehensions about data quality, and small, nonrepresentative samples.

Member hospitals contributing to the database use standardized report formats. Abstractors have ongoing training. Moreover, efforts to minimize errors are met through automated editing and data checks at the time of processing.

Pains have been taken to assure breadth and representativeness through careful statistical sampling of the largest hospital patient discharge database available.

This is not to claim that there are no anomalies caused by diverse reporting practices or that data errors are entirely edited in the sample used to construct the mortality norms. When interpreting the mortality norms for quality assessment, CPHA researchers acknowledge the importance of these issues and have tried to minimize their effect.

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[2] Mark S. Blumberg, *Comments on HCFA Hospital Death Rate Statistical Outliers*, Health Services Research 21:6 (1987):715.

[3] See DesHarnais, Susan et al., *Using Data to Evaluate Performance*, Michigan Hospitals (October 1987):22, for a listing of recent outcome studies.

ORGANIZATION OF THE 1987 RISK-ADJUSTED HOSPITAL MORTALITY NORMS

The data in the 1987 Risk-Adjusted Hospital Mortality Norms Workbook are presented in DRG Cluster Tables. These tables, beginning on Page 1 of the Tables Section, are stratified by DRG cluster, geographic region, presence or absence of complications and comorbidities (CCs), and age group. There are 326 DRG clusters.

DRG Clusters

Diagnosis Related Groups (DRGs) were not designed as a patient outcome measure. Some of the factors associated with increased risk of death for particular clinical conditions, e.g., age and comorbidity, are the basis for DRG divisions. This is most obvious for Acute Myocardial Infarction (AMI), DRGs 121, 122, and 123. DRG 123 includes only patients who died.

Consequently, the DRGs have been regrouped into clusters to examine how the factors used for DRG divisions, e.g., age and comorbidity, are associated with increased risk of death. This regrouping of patients includes 326 categories. Appendix 4 provides a mapping of DRG clusters to DRGs along with the English description of the clinical condition.

The 1987 Risk-Adjusted Mortality Norms Workbook uses the third revision DRGs, in effect from 1 October 1986 through 30 September 1987. There are 473 DRGs in the third revision.

Geographic Region

As previously described, the two million patient discharge sample is initially stratified by nine census divisions. These nine divisions are collapsed into four regions in the 1987 Risk-Adjusted Hospital Mortality Norms Workbook:

Region	Division
1. Northeast	New England Middle Atlantic
2. North Central	East North Central West North Central
3. South	South Atlantic East South Central West South Central
4. West	Mountain Pacific

State inclusions for the four regions are listed in Appendix 2. For each DRG cluster, mortality rates are provided for each region and for the U.S. overall.

Presence or Absence of Complications and Comorbidities (CCs)

To determine the presence of complications or comorbidities (CCs), a patient's secondary diagnoses are compared to a list of ICD-9-CM diagnosis codes defined by the Health Care Financing Administration (HCFA) as CCs.

The HCFA definitions are:

- A complication is a condition that arises during the hospital stay that prolongs length of stay by at least one day in approximately 75 percent of the cases.
- A comorbidity is a preexisting condition that will, because of its presence with a specific diagnosis, cause an increase in length of stay by at least one day in approximately 75 percent of the cases.

The list of CCs is included as Appendix 5. This list corresponds to the third revision DRGs.

To ensure ease of use in the workbook format and consistency with HCFA definitions, complications--which occur during the patient's stay and may be hospital or physician-caused, e.g., postoperative wound infections--have not been separated from comorbidities--which are existing conditions and unrelated to provider performance, e.g., diabetes.

Ideally, when adjusting mortality risk factors, patient complication codes need to be taken out. Recognizing the time constraints against subtracting patients with specified complications manually in the workbook, and acknowledging the familiarity with CCs, codes constituting complications are not deleted from the predicted mortality norms.

Age Groups

Patients are stratified by the following age groups (in years):

<65
65-74
75+

Predicted Mortality Norms

The norm represents a risk-adjusted predicted death rate. Each norm is practice-derived or empirically-based. In other words, the evaluation of risk factors is based on existing care patterns as represented by the two million patient discharge sample. The sample includes all payors and patient types and is representative of the universe of U.S. short-term general, nonfederal hospitals.

IMPORTANT NOTE:

> The practice-derived characteristic of the predicted mortality norms is significant. It is not the intention of CPHA researchers to establish a standard recommending what national and regional death rates should be. These predicted mortality norms are descriptive rather than prescriptive.

The predicted mortality norms are also risk-adjusted, taking into account differences in case mix and complexity. The risk-adjustment factors included for each projected patient discharge are:

1. DRG Cluster
2. Presence or absence of complications and comorbidities (with CCs or without CCs)
3. Age group (<65, 65-74, 75+)

Technical Model

To obtain the national and regional predicted mortality norms, the procedure is:

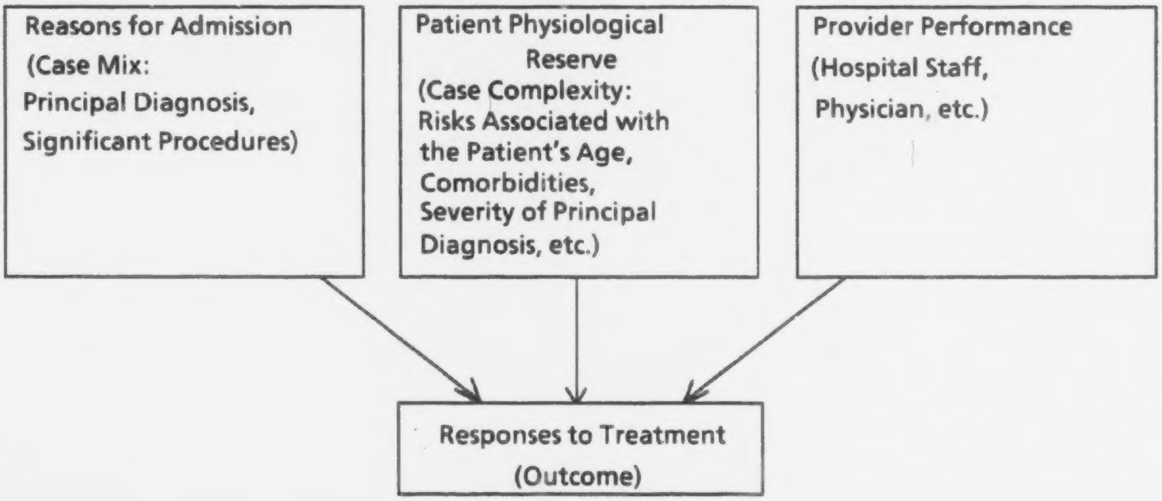
1. The projected patient counts are derived from the two million patient discharge sample.
2. The projected patient discharges are split into their respective:
    - Region
    - DRG cluster
    - CC category
    - Age group
3. The projected number of patient discharges with a disposition of "died" and the projected number of total patient discharges in each stratified group are counted.
4. The projected number of patient discharges with a disposition of "died" in each stratified group is divided by the projected number of total patient discharges in that group.
5. This proportion is multiplied by 100 to obtain the norm, expressed as a percent.

Conceptual Model

In a paper published by CPHA researchers, the authors suggest that patient health outcomes are the result of three factors:

- Case mix; the reasons for hospital admission (principal diagnosis, significant procedures).
- Case complexity; the risks associated with the patient's level of physiological reserve (age, comorbidities, race, sex, family history of disease, health behavior, etc.).
- Provider performance.

This relationship is illustrated in the following graphic:


Reasons for Admission (Case Mix: Principal Diagnosis, Significant Procedures)
Patient Physiological Reserve (Case Complexity: Risks Associated with the Patient's Age, Comorbidities, Severity of Principal Diagnosis, etc.)
Provider Performance (Hospital Staff, Physician, etc.)
Responses to Treatment (Outcome)

Accordingly, differences in outcome or provider performance relating to quality can be isolated, once differences in reasons for admission and patient physiological reserve, i.e., case mix and complexity, have been adjusted.[4]

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[4] Ibid., pp 21,22.

CRITIQUE OF HCFA METHODOLOGY

The introduction of this conceptual model underlines the importance of risk-adjustment. In addition, it strengthens the argument favoring mortality indices in which patient-level rather than hospital-level variables are used. This contrasts with the approach initially taken by the Health Care Financing Administration (HCFA) in March, 1986 when it first published provider-specific mortality data based on a hospital-level approach. CPHA's researchers, recognizing the problems of the hospital-level approach to mortality data applications early on, developed the risk-adjusted mortality rate model relying on patient-level data.

The table below provides a brief comparison between the methodology used by HCFA for 1987 data with the methodology used in this workbook.

Comparison Point	**CPHA Risk-Adjusted Mortality Methodology** (1987 workbook)	**HCFA Risk-Adjusted Mortality Methodology** (Release of 1987 data)
Level of analysis	Patients	Patients
Dependent variable	In-hospital deaths	Deaths within 30 days of admission
Choice of risk factors	Based on validated model • Practice-derived • Constructed from discharge data in U.S. short-term general, nonfederal hospitals	Based on unvalidated model • Expert opinion • Experience from mortality analyses of 1985 and 1986 data
Risk factors	• DRG cluster (326) • Presence or absence of complications and comorbidities • Age group	• Broad DRG groupings (Sixteen high or low risk of death categories) • Age • Sex • Complicating diagnoses (Limited number) • Prior hospitalization in 1987 • Transfer status
Scope	All patients	Medicare patients, all others

While HCFA's shift to the patient-level approach with 1986 data was a step in the right direction, the current model is emblematic of the concern researchers have expressed over the dependence on inappropriate and untested risk-adjusted mortality rate models as indicators of quality. Some advisories about the HCFA model cited by CPHA researchers are described below.

Unvalidated Model

The model HCFA is currently using has not yet been validated. (Last year, HCFA used a similar model without validating it prior to use.) While HCFA is currently conducting studies to test their model, it is still unknown at this writing whether HCFA's model is a valid predictor of mortality. In contrast, the model which resulted in the methodology incorporated into this workbook, was tested initially with 1983 data from U.S. short-term general, nonfederal hospitals. The findings were encouraging; the model claims a strong relationship between predicted and actual death rates over all DRG clusters and hospital combinations.[5]

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[5] Ibid., p.26.

Inappropriate DRG Groupings

The HCFA-defined high and low risk of death DRG categories are broad and all-encompassing. As a result, they forfeit the potential clinical homogeneity of the DRG classification system. It is well known that death rates associated with different principal diagnoses vary greatly; it is thus necessary to develop as clinically homogeneous groups as possible when modeling factors associated with risk of death.

Misleading Dependent Variable

The HCFA methodology recommends a 30-day survival following the last admission in 1987 as the principal dependent variable for provider performance. The rationale for this specific choice is not clear. While it seems HCFA is attempting to compensate for widespread variations in lengths of stay by providing an equal observation interval, the strategy has several negative effects.

First, it is impossible to determine whether poor hospital care caused the majority of deaths occurring within 30 days of admission, since most deaths occur after discharge.

Second, using the patient's last admission fails to take into account other hospitalizations during the year when the patient survived.

Third, it is infeasible for providers to verify HCFA's claims about out-of-hospital deaths and last admissions, thus making such data less credible.

The CPHA methodology, unlike that of HCFA's, does not assign any credit nor does it discredit any provider by implicitly deciding a provider should be held responsible for a death once a patient has left. Noting some of the caveats of the HCFA model does not mean the CPHA model is flawless. A description of the error ranges used in conjunction with the predicted mortality norms follows.

Error Ranges

Each norm in the workbook is accompanied by an error range, the percent denoted within the parentheses. The error range serves as a cautionary flag when interpreting the norms. Error ranges are given for an approximate 99 percent confidence level. Each represents three times the standard error for discharges in the two million patient discharge sample stratified by census region, DRG cluster, CC status, and age group.

The error range is contingent upon the projected estimate of discharges represented by a mortality norm cell, rather than the actual number of discharges. The projections are subject to an additional source of error: sampling error. Therefore, the error ranges provided should be viewed as minimum allowances for error. If the error range for a norm is greater than 20 percent, the norm is not reported in the book.

To give an example, the national predicted mortality norm for Stomach, Esophageal, and Duodenal Procedures (DRG cluster 106) for a patient discharge with CCs, in age group 75+, is 16.3 percent. The error rate is ±0.9 percent. This means 99 percent of the time, the mortality rate for discharges with those attributes will fall between 16.3-0.9 and 16.3+0.9, i.e., 15.4 percent to 17.2 percent. In this illustration, the error range is small, indicating the norm is a fairly accurate measure of the mortality rate for all such discharges.

A second example, however, illustrates the rationale for including error ranges and the need to exercise caution when using them to make inferences about quality of medical care. In a hypothetical example, the predicted mortality norm for DRG cluster X for a patient with CCs, in age group 75+, is 50 percent with an error rate of 40 percent. This means that the mortality rate for such patients will fall between 10 and 90 percent, 99 percent of the time. The wide range signifies that the accuracy of the norm is fairly low. It also indicates that the sample size for this group of patients is small. For these reasons, mortality norms with error ranges greater than 20 percent are not recorded.

IMPORTANT NOTE:

The smaller the error range of a national or regional predicted mortality norm, the more reliable the norm; the higher the error range the less accurate the norm as a measure of the mortality rate for a specific category of patient discharges. In reading the norms, hyphens denote there are no data for the patient discharge category. Asterisks indicate the data are not being reported because the error rate is 20 percent or higher.

Exclusions

In addition to the exclusion of speciality hospitals, there are other exclusions performed at the patient level. The following patients are not included in the 1987 Risk-Adjusted Hospital Mortality Norms Workbook.

1. Stillborns
2. Newborns
3. Discharges transferred to another short-term hospital
4. Discharges with stays less than one day, discharged alive
5. Discharges with diagnosis-age inconsistency or procedure-age inconsistency

Stillborn discharges are excluded for the obvious reason that all have died. In categories 2, 3, and 4, it is impossible to evaluate the treatment of those patients because hospitalization is abbreviated. In addition, the newborn and patient discharge transfer data are incomplete, and many of the less-than-one-day patient discharges are presumably outpatients. The fifth exclusion eliminates patient records with inconsistent data. Certain diagnoses and procedures are only applicable to patients falling within a particular age range. Those patients whose age falls outside the range implied by a recorded diagnosis or procedure code are excluded.

There are several reasons it is necessary to keep in mind the hospital- and patient-level exclusions as well as the method for constructing the predicted mortality norms.

The first involves the charge, sometimes leveled against mortality data, that such data are a nonspecific indicator of quality of medical care. According to this critique, mortality data are poor quality measures because most patients do not die in the hospital, though their treatment may have been negligent or they may have been misdiagnosed. Thus, it is important to clearly understand and acknowledge the limits of mortality data in order to prevent overreliance on numbers, in this case the predicted mortality norms. The appropriate use of such norms requires an appreciation of the overall care patterns in an institution or of a physician.

Second, the 1987 Risk-Adjusted Hospital Mortality Norms have practical applications and will be used as a complement to other data sources used to administer quality assurance programs. Consequently, it is essential to know how to calculate and interpret the norms when comparing them to individual institutions and providers.

INSTRUCTIONS FOR USING THE WORKBOOK

Calculating the Actual Death Rates

To obtain actual death rates to compare to the predicted mortality norms, this procedure is recommended:

1. **Determine the patient sample, i.e., the total number and types of patients, and the time period, i.e., year, to be studied.**

   For example, if the unit of analysis is all hospital patients, use 1987 total patient discharges. Alternatively, if the unit of analysis is employees who were hospitalized with cardiovascular DRGs, use employees in 1987 who were discharged with the specified DRGs, and so on.

IMPORTANT NOTE:

> Physicians can more reliably calculate death rates for their practices by replacing data for one year, with the number of patients they have treated for specific clinical conditions during their professional careers.
>
> For example, a neurosurgeon has treated 90 patients in DRG cluster 7, Peripheral & Cranial Nerve & Other Nerve System Procedures, two of whom have died over his/her career. The larger numbers enable comparisons given that individual practitioner databases can not compare in size to hospital databases. In addition, the total career figures give credit to new learning and experience.
>
> The same rule holds true when death rates by physician are calculated for an institution or agency, such as a hospital or PRO.

2. **Classify the patient sample into the DRG clusters under examination.**

   If examining DRG cluster 7, Peripheral & Cranial Nerve & Other Nerve System Procedures, note that it combines DRGs 7 and 8.

   For purposes of illustration, in 1987, a hospital has 300 patient discharges in DRG 7 and 300 patient discharges in DRG 8. To get the cluster total:

   300 patient discharges
   + 300
   600 patient discharges in DRG cluster 7

3. **Stratify and place the DRG cluster patient discharges into their appropriate risk categories:**

   - With complications/comorbidities
     <65 years
     65-74
     75+

   - Without complications/comorbidities
     <65 years
     65-74
     75+

To continue the illustration using DRG cluster 7, suppose there are 100 patients (out of 600 in DRG cluster 7) in each of the risk categories.

Total number of patient discharges in DRG Cluster 7 = 600.

Patients with CCs			**Patients without CCs**		
<65	65-74	75+	<65	65-74	75+
100	100	100	100	100	100

4. **In the space provided (the empty boxes at the bottom of each table), write the total number of patient discharges in each risk category below the division sign.**

ACTUAL DEATH RATES

With CCs

Age	<65	65 - 74	75 +
No. of Patients Who died Total No. Patients	÷ 100	÷ 100	÷ 100
	=	=	=
% Patients Who Died			

Without CCs

Age	<65	65 - 74	75 +
No. of Patients Who died Total No. Patients	÷ 100	÷ 100	÷ 100
	=	=	=
% Patients Who Died			

As illustrated above, the total number of patient discharges in each risk category for DRG cluster 7 is recorded. This number represents the denominator for the actual death rate.

5. **Determine the number of patients in each risk category who died.**

Again following the example, the number of patients who died are listed in each risk category for DRG cluster 7:

Patients with CCs			**Patients without CCs**		
<65	65-74	75+	<65	65-74	75+
10	15	30	5	10	15

The total number of patients who died is 85 out of 600 patient discharges in DRG cluster 7.

6. In the space provided, write in the number of patients who died above the division sign.

DRG CLUSTER: 7
Peripheral & Cranial Nerve & Other Nerve Syst Procedures
DRG(s): 7, 8

ACTUAL DEATH RATES

With CCs
Age

	<65	65 – 74	75 +
No. of Patients Who died Total No. Patients	10 ÷	15 ÷	30 ÷
	=	=	=
% Patients Who Died			

Without CCs
Age

	<65	65 – 74	75 +
No. of Patients Who died Total No. Patients	5 ÷	10 ÷	15 ÷
	=	=	=
% Patients Who Died			

As illustrated above, the number of patients who died in each risk category for DRG cluster 7 is recorded. This number represents the numerator for the actual death rate.

7. **Then divide the total number of patients who died by the total number of patient discharges in each risk category and multiply by 100.**

To continue the example, the total number of patients who died in each risk category is divided by the respective number of patient discharges in each risk category for DRG cluster 7 and multiplied by 100. The results are displayed below.

DRG CLUSTER: 7
Peripheral & Cranial Nerve & Other Nerve Syst Procedures
DRG(s): 7, 8

ACTUAL DEATH RATES

	With CCs Age				Without CCs Age		
	<65	65 - 74	75 +		<65	65 - 74	75 +
No. of Patients Who died / Total No. Patients	÷	÷	÷	No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died	10%	15%	30%	% Patients Who Died	5%	10%	15%

8. **The result is the percent of discharges in each risk category where the patient died. This represents the actual death rate.**

To finish the example, the actual risk-adjusted death rates for DRG cluster 7, Peripheral & Cranial Nerve & Other Nerve System Procedures are:

Patients with CCs, Age <65 = 10%
Patients with CCs, Age 65-74 = 15%
Patients with CCs, Age 75+ = 30%
Patients without CCs, Age <65 = 5%
Patients without CCs, Age 65-74 = 10%
Patients without CCs, Age 75+ = 15%

Calculating Error Ranges for the Actual Death Rates

The value of the predicted mortality norms is enhanced when an error range or confidence interval for the actual death rates is figured.

To obtain the error range for an actual death rate, follow this procedure:

1. OBTAIN THE ACTUAL DEATH RATE, i.e., THE PERCENT OF DISCHARGES WHERE THE PATIENT DIED, AND THE TOTAL NUMBER OF DISCHARGES IN EACH RISK CATEGORY FOR THE DRG CLUSTER.
   One error range is presented for each risk category for a DRG cluster. Returning to the example used to calculate the actual death rates for DRG cluster 7, the actual death rate is 10 percent and the total number of patients is 100 for patient discharges with CCs, age <65.

2. GO TO APPENDIX 6, THE ERROR RANGE TABLES STARTING ON PAGE 331 IN THE APPENDIX SECTION.
   The horizontal axis of the table (across the top of the page) represents the total number of patient discharges starting at 5 up to 1600. The vertical axis of the table (down the page) represents the actual death rate, starting at 1 percent up to 50 percent.

3. FIND THE TOTAL NUMBER OF PATIENT DISCHARGES ON THE HORIZONTAL AXIS (OR THE NUMBER CLOSEST) AND THE PERCENT WHO DIED ON THE VERTICAL AXIS. LOCATE THE CORRESPONDING NUMBER.

PATIENT NUMBER

PERCENT DIED	85	90	95	100	105	110	115	120
1%	3.24	3.15	3.06	2.98	2.91	2.85	2.78	2.72
2%	4.56	4.43	4.31	4.20	4.10	4.00	3.92	3.83
3%	5.55	5.39	5.25	5.12	4.99	4.88	4.77	4.67
4%	6.38	6.20	6.03	5.88	5.74	5.61	5.48	5.37
5%	7.09	6.89	6.71	6.54	6.38	6.23	6.10	5.97
6%	7.73	7.51	7.31	7.12	6.95	6.79	6.64	6.50
7%	8.30	8.07	7.85	7.65	7.47	7.30	7.14	6.99
8%	8.83	8.58	8.35	8.14	7.94	7.76	7.59	7.43
	9.31	9.05	8.81		8.38	8.19	8.01	7.84
10%				9.00	8.78	8.58	8.39	8.22
	10.18	9.89	9.63		9.16	8.95	8.75	8.57
12%	10.57	10.28	10.00	9.75	9.51	9.30	9.09	8.90
13%	10.94	10.63	10.35	10.09	9.85	9.62	9.41	9.21
14%	11.29	10.97	10.68	10.41	10.16	9.93	9.71	9.50
15%	11.62	11.29	10.99	10.71	10.45	10.21	9.99	9.78

Comparison and Interpretation of Actual Death Rates to Predicted Mortality Norms

The next step involves a straightforward comparison. Simply look at the actual death rate and error range for a DRG cluster in each risk category, and determine the difference.

For the purpose of illustration, one comparison of an actual death rate to a predicted mortality norm is shown on the next page. The actual death rate for DRG cluster 7, Peripheral & Cranial Nerve & Other Nerve System Procedures, is compared to the national predicted mortality norm for patient discharges with CCs, in age group <65. The actual death rate is 10 percent, with an error range of ±9.0 percent (1.0 percent to 19.0 percent). The national predicted mortality norm is 6.6 percent with an error range of 1.6 percent (5.0 to 8.2).

To make the comparison more serviceable, consider the actual death rate and predicted mortality norm as ranges themselves when each of their error ranges is factored in. In this instance, the actual death rate range is 1.0 to 19.0. The predicted mortality norm range is 5.0 to 8.2. Since the actual death rate range overlaps the predicted mortality norm range, the user can assume that for DRG cluster 7, the actual death rate range is not necessarily aberrant from national mortality patterns.

DRG CLUSTER: 7
Peripheral & Cranial Nerve & Other Nerve Syst Procedures
DRG(s): 7, 8

RISK – ADJUSTED EXPECTED DEATH RATES

NORMS
% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65 – 74	Age 75 +
U.S.	6.6 (1.6)	( )	( )
Northeast	( )	( )	( )
North Central	( )	( )	( )
South	( )	( )	( )
West	( )	( )	( )

Without CCs

Region	Age <65	Age 65 – 74	Age 75 +
U.S.	( )	( )	( )
Northeast	( )	( )	( )
North Central	( )	( )	( )
South	( )	( )	( )
West	( )	( )	( )

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65 – 74	Age 75 +
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died	10.0 (9.0)		

Without CCs

	Age <65	Age 65 – 74	Age 75 +
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

IMPORTANT NOTE:

> In most instances, an institution- or provider-specific actual death rate range, i.e., after the error range has been added and subtracted, will overlap the range figured for a specific predicted mortality norm. This fact does not afford the user to make inferences about quality of medical care, e.g., the institution or provider offers "average" quality of care; it simply means the institution or provider is not a statistical outlier. A statistical outlier signifies that an institution's or provider's actual death rate range and the predicted mortality norm range for a specific DRG cluster do not overlap.
>
> Similarly, if the institution's or provider's actual death rate range does not overlap a specific predicted mortality norm range, i.e., it is higher or lower, its outlier status does not necessarily signify the provision of high or low quality medical care. It simply suggests that further investigation into the reasons for outlier status are in order.

For example, suppose the provider's actual death rate range for DRG cluster 7, Peripheral & Cranial Nerve & Other Nerve System Procedures, for patient discharges with CCs, in age group <65, is 9.0 to 19.0 percent. The national predicted mortality norm range is 5.0 to 8.2 for the same patient group.

In such an instance, where the actual death rate range does not overlap and is higher than the predicted mortality norm range, the user might accomplish these additional steps:

- Question the accuracy of the norm for patient discharges under study by adhering to the rule of thumb: the higher the error range the less reliable the norm.
- Ascertain whether the patient samples upon which the actual death rates are calculated are fairly comparable to the patient discharges on which the norm is based.
- Establish whether the risk factors are appropriate for the patient sample for which the actual death rates are calculated.

To finish the illustration: The user finds the error ranges for DRG cluster 7 are small and concludes the norms are reliable for that cluster but that the patient sample for the specific provider under study exclusively includes referrals of very sick patients, all with multiple CCs. The value of the additional inquiry is that it furnished information which may account, to some degree, for the higher actual death rate range of an individual provider for DRG cluster 7.

If, however, such an investigation yields affirmative responses to each category of inquiry outlined above, it may be appropriate, in cases where actual death rate ranges are outliers, to conduct an in-depth quality assessment.

IMPORTANT NOTE:

> When interpreting the predicted mortality norms in this workbook, outlier status--the actual death rate ranges do not overlap with the predicted mortality norm ranges--does not confer a poor quality of care label on those institutions or providers with higher actual mortality rates, or "center of excellence" designations on those with lower actual mortality rates. Outlier status simply means further investigation may be appropriate.

The 1987 Risk-Adjusted Hospital Mortality Norms Workbook is most valuable when it is used in conjunction with information about:

- Limitations about mortality data applications.
- Special characteristics of the patient sample of the institution or provider under study.
- Other risk-adjusted mortality rate methodologies for comparative purposes.
- Other quality measures to complement mortality data, e.g., postsurgical complications and readmission rates, integrated into a comprehensive quality assurance program.

USER SERVICES

The Publications staff who created the 1987 Risk-Adjusted Hospital Mortality Norms Workbook are strongly committed to improving the applications of quality measures in general and in providing support and advice to users. Below are other support services offered by CPHA staff:

- Users with questions about the workbook and other CPHA publications, contact 1-800-521-6210, Extension 3214.
- Users representing PAS hospitals interested in obtaining mortality rates for their facility, contact 1-800-521-6210, Extension 4321.

The CPHA Publications staff are interested in user evaluation of the 1987 Risk-Adjusted Hospital Mortality Norms Workbook. Please call toll-free with your suggestions.

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Blumberg, M.S. *Comments on HCFA Hospital Death Rate Statistical Outliers*. Health Services Research 21:6 (1987):715-739.

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TABLES

With CCs
Age

<65	65 – 74	75 +
– –	**	
(– –)	(**)	( )

Dashes indicate
there are no
patients in
this cell

Asterisks indicate
an error rate
of 20% or
greater

A note to users of the 1986 Risk-Adjusted Hospital Mortality Norms Workbook:

If you used last year's edition, please note that the age ranges have been changed to <65 years, 65-74, and 75+. Last year, they were <65 years, 65-69, and 70+.

DRG CLUSTER: 1
CRANIOTOMY, AGE > 17 EXCEPT FOR TRAUMA
DRG(S): 1

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	12.2 (1.0)	15.6 (1.5)	21.8 (1.9)
Northeast	15.4 (2.4)	21.6 (3.3)	23.2 (4.2)
North Central	16.8 (2.1)	19.4 (3.1)	20.6 (3.9)
South	8.5 (1.7)	11.1 (2.4)	20.7 (3.3)
West	10.4 (2.4)	13.4 (3.6)	23.4 (4.0)

Region	Without CCs Age <65	 65-74	 75+
U.S.	3.5 (1.1)	5.0 (2.0)	6.0 (2.6)
Northeast	5.2 (2.5)	5.5 (4.5)	4.7 (6.5)
North Central	3.0 (2.1)	5.6 (3.7)	17.5 (5.6)
South	3.2 (1.6)	1.7 (3.2)	0.0 (3.9)
West	3.4 (2.9)	11.7 (5.3)	8.4 (6.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 2
CRANIOTOMY FOR TRAUMA AGE >17
DRG(S): 2

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	17.6 (1.7)	27.7 (4.2)	35.1 (2.9)	U.S.	9.5 (2.6)	6.9 (6.4)	13.6 (5.8)
Northeast	17.4 (3.8)	29.8 (7.9)	31.7 (7.2)	Northeast	14.7 (6.6)	6.4 (13.4)	0.0 (12.6)
North Central	12.5 (3.6)	31.5 (8.1)	38.9 (7.1)	North Central	13.6 (6.0)	14.7 (12.0)	15.8 (10.8)
South	19.8 (2.7)	17.2 (7.9)	35.0 (4.4)	South	6.8 (3.6)	9.0 (11.5)	32.2 (11.0)
West	19.2 (3.7)	36.4 (10.6)	34.8 (6.2)	West	8.7 (6.4)	0.0 (15.4)	0.0 (12.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 3
CRANIOTOMY AGE <18
DRG(S): 3

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	6.7 (1.9)	-- (--)	-- (--)	U.S.	2.9 (1.7)	-- (--)	-- (--)
Northeast	7.8 (4.3)	-- (--)	-- (--)	Northeast	2.2 (4.5)	-- (--)	-- (--)
North Central	8.9 (5.0)	-- (--)	-- (--)	North Central	6.0 (4.4)	-- (--)	-- (--)
South	5.5 (2.5)	-- (--)	-- (--)	South	2.4 (2.1)	-- (--)	-- (--)
West	7.5 (5.3)	-- (--)	-- (--)	West	2.7 (4.8)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 4
SPINAL PROCEDURES
DRG(S): 4

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	4.3 (2.0)	7.2 (4.1)	15.4 (5.7)
Northeast	7.9 (5.0)	15.2 (10.7)	36.0 (12.1)
North Central	4.3 (4.4)	12.2 (8.8)	8.5 (11.3)
South	0.2 (3.0)	0.0 (6.4)	13.9 (9.4)
West	9.9 (4.2)	10.4 (8.8)	0.0 (15.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.3 (1.4)	1.6 (4.8)	0.0 (9.3)
Northeast	0.0 (3.6)	14.9 (14.9)	** (**)
North Central	0.6 (2.9)	0.0 (10.9)	** (**)
South	0.0 (2.2)	0.0 (7.4)	0.0 (14.0)
West	0.7 (3.2)	0.0 (9.2)	0.0 (15.5)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 5
EXTRACRANIAL VASCULAR PROCEDURES
DRG(S): 5

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	3.6 (1.6)	3.5 (1.3)	3.1 (1.5)	U.S.	0.4 (1.2)	0.3 (1.1)	0.0 (1.5)
Northeast	5.1 (4.2)	3.8 (3.1)	3.2 (4.2)	Northeast	0.0 (3.1)	0.0 (3.0)	0.0 (4.5)
North Central	2.7 (2.8)	1.0 (2.2)	6.0 (2.8)	North Central	0.3 (2.2)	0.3 (2.0)	0.0 (2.6)
South	4.7 (2.8)	4.8 (2.3)	1.7 (2.7)	South	0.7 (2.1)	0.3 (2.0)	0.0 (3.0)
West	2.0 (3.9)	5.4 (2.8)	1.2 (3.3)	West	0.0 (3.1)	0.4 (2.3)	0.0 (3.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 6
CARPAL TUNNEL RELEASE
DRG(S): 6

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.0)	0.0 (8.6)	0.0 (7.7)
Northeast	0.0 (8.5)	** (**)	** (**)
North Central	0.0 (6.8)	0.0 (16.4)	0.0 (13.9)
South	0.0 (7.0)	0.0 (13.4)	0.0 (13.2)
West	0.0 (11.0)	0.0 (16.6)	0.0 (14.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.7)	0.0 (4.7)	0.0 (5.0)
Northeast	0.0 (4.1)	0.0 (8.5)	0.0 (8.9)
North Central	0.0 (3.8)	0.0 (9.6)	0.0 (10.2)
South	0.0 (2.6)	0.0 (8.5)	0.0 (8.2)
West	0.0 (4.7)	0.0 (11.6)	0.0 (17.8)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 7
PERIPHERAL & CRANIAL NERVE & OTHER NERVE SYSTEM PROCEDURES
DRG(S): 7, 8

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	6.6 (1.6)	14.2 (2.8)	14.0 (2.8)
Northeast	13.1 (3.5)	23.1 (4.7)	20.8 (4.7)
North Central	5.5 (3.5)	4.5 (6.6)	13.2 (6.3)
South	4.2 (2.5)	14.9 (4.9)	9.0 (4.7)
West	5.2 (4.4)	1.8 (7.8)	10.5 (7.9)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.1 (0.8)	0.0 (2.9)	0.0 (4.2)
Northeast	0.0 (1.8)	0.0 (6.2)	0.0 (7.6)
North Central	0.0 (1.7)	0.0 (5.5)	0.0 (7.7)
South	0.2 (1.3)	0.0 (5.1)	0.0 (8.3)
West	0.0 (2.2)	0.0 (6.7)	0.0 (10.8)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 8
SPINAL DISORDERS & INJURIES
DRG(S): 9

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	 65-74	 75+
U.S.	8.3 (3.2)	9.7 (8.1)	18.4 (5.4)
Northeast	14.0 (7.3)	** (**)	0.0 (9.6)
North Central	0.0 (7.6)	17.7 (10.9)	11.1 (12.9)
South	10.6 (5.1)	** (**)	49.0 (10.7)
West	5.8 (6.6)	0.0 (15.0)	16.0 (10.9)

Without CCs

Region	Age <65	 65-74	 75+
U.S.	0.0 (2.6)	6.9 (8.1)	12.5 (13.6)
Northeast	0.0 (5.9)	32.8 (17.6)	** (**)
North Central	0.0 (5.6)	** (**)	** (**)
South	0.0 (4.2)	0.0 (11.9)	** (**)
West	0.0 (5.8)	0.0 (15.9)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 9
NERVOUS SYSTEM NEOPLASMS
DRG(S): 10, 11

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	25.5 (1.1)	28.1 (1.4)	28.9 (1.8)
Northeast	31.7 (2.1)	34.5 (2.9)	38.0 (3.3)
North Central	24.8 (2.0)	18.9 (2.7)	24.4 (3.6)
South	21.1 (1.9)	36.0 (2.5)	30.0 (3.1)
West	25.6 (2.5)	19.1 (3.4)	14.8 (5.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	11.7 (1.5)	19.4 (2.8)	15.4 (3.2)
Northeast	6.1 (3.5)	15.9 (6.2)	3.5 (7.2)
North Central	13.1 (3.0)	14.2 (5.5)	9.7 (6.0)
South	13.3 (2.4)	27.7 (4.5)	25.4 (4.8)
West	12.0 (4.0)	12.7 (6.7)	8.6 (11.3)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 10
DEGENERATIVE NERVOUS SYSTEM DISORDERS
DRG(S): 12

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	8.4 (1.8)	7.9 (1.9)	6.8 (1.4)	U.S.	0.9 (1.7)	1.4 (2.1)	1.4 (1.6)
Northeast	4.8 (5.0)	10.0 (4.0)	6.6 (3.0)	Northeast	0.0 (4.3)	3.7 (5.0)	3.9 (3.5)
North Central	8.1 (3.5)	6.9 (3.6)	3.4 (2.7)	North Central	0.8 (3.3)	1.0 (3.9)	0.7 (3.2)
South	9.4 (2.8)	9.7 (3.2)	8.4 (2.4)	South	1.6 (2.6)	1.0 (3.5)	0.0 (2.6)
West	9.3 (4.8)	1.1 (5.5)	9.5 (3.6)	West	0.0 (4.1)	0.0 (5.3)	2.5 (4.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 11
MULTIPLE SCLEROSIS AND CEREBELLAR ATAXIA
DRG(S): 13

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.1 (2.0)	0.0 (6.8)	4.3 (8.0)
Northeast	1.4 (4.6)	0.0 (15.8)	0.0 (11.7)
North Central	0.6 (3.1)	0.0 (12.9)	** (**)
South	0.3 (4.2)	0.0 (10.8)	0.0 (17.4)
West	4.0 (5.8)	0.0 (17.5)	25.0 (19.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.3)	3.0 (6.7)	0.0 (7.8)
Northeast	0.0 (3.0)	13.6 (14.2)	0.0 (17.5)
North Central	0.0 (2.1)	0.0 (12.1)	0.0 (17.1)
South	0.0 (2.3)	0.0 (11.5)	0.0 (11.5)
West	0.0 (4.4)	0.0 (19.4)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 12
CEREBROVASCULAR DISORDERS EXCEPT TIA
DRG(S): 14

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	16.2 (0.6)	17.2 (0.5)	20.7 (0.4)
Northeast	18.3 (1.4)	18.3 (1.1)	24.6 (0.8)
North Central	13.1 (1.3)	17.3 (1.1)	18.6 (0.7)
South	16.0 (1.0)	17.5 (0.9)	21.8 (0.6)
West	18.6 (1.6)	15.0 (1.3)	16.1 (0.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	7.5 (0.7)	8.2 (0.7)	10.8 (0.6)
Northeast	3.3 (1.6)	9.3 (1.6)	11.1 (1.2)
North Central	6.6 (1.5)	8.2 (1.5)	9.8 (1.1)
South	10.0 (1.1)	9.2 (1.2)	11.6 (0.9)
West	6.9 (1.7)	4.9 (1.7)	9.9 (1.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ――――― Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ――――― Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 13
TRANSIENT ISCHEMIC ATTACKS
DRG(S): 15

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	0.3 (1.0)	1.1 (0.8)	1.5 (0.6)
Northeast	0.9 (2.2)	0.6 (1.7)	1.9 (1.2)
North Central	0.0 (1.8)	0.5 (1.6)	1.3 (1.1)
South	0.2 (1.7)	1.7 (1.3)	1.1 (0.9)
West	0.5 (2.8)	1.4 (2.4)	2.0 (1.6)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (0.8)	0.2 (0.8)	0.1 (0.7)
Northeast	0.2 (1.8)	0.0 (1.8)	0.1 (1.4)
North Central	0.0 (1.5)	0.6 (1.5)	0.1 (1.4)
South	0.0 (1.4)	0.0 (1.5)	0.0 (1.1)
West	0.0 (2.2)	0.3 (2.1)	0.2 (1.9)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 14
NONSPECIFIC CEREBROVASCULAR DISORDERS
DRG(S): 16, 17

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	14.9 (2.3)	8.3 (2.1)	9.1 (1.4)	U.S.	0.4 (2.2)	0.0 (3.1)	2.1 (2.3)
Northeast	20.2 (4.6)	2.0 (5.4)	8.6 (3.1)	Northeast	0.0 (5.3)	0.0 (10.1)	1.7 (5.0)
North Central	11.0 (4.2)	11.4 (3.8)	7.1 (3.1)	North Central	0.0 (4.1)	0.0 (5.9)	0.0 (4.2)
South	16.1 (4.0)	9.9 (3.4)	10.2 (2.3)	South	1.0 (3.2)	0.0 (4.2)	3.7 (3.6)
West	11.5 (5.8)	2.5 (6.2)	10.0 (3.4)	West	0.0 (7.0)	0.0 (9.9)	2.8 (7.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 15
CRANIAL & PERIPHERAL NERVE DISORDERS
DRG(S): 18, 19

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.8 (1.2)	1.1 (1.8)	5.6 (2.0)
Northeast	2.0 (2.7)	0.0 (3.7)	5.0 (4.4)
North Central	0.7 (2.3)	0.8 (3.4)	9.0 (3.9)
South	0.3 (1.9)	1.3 (3.1)	6.9 (3.6)
West	0.5 (3.0)	2.6 (4.2)	0.0 (4.5)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.0 (1.8)	0.0 (2.2)
Northeast	0.0 (1.8)	0.0 (4.0)	0.0 (4.9)
North Central	0.0 (1.5)	0.0 (3.6)	0.0 (3.9)
South	0.0 (1.2)	0.0 (2.6)	0.0 (3.6)
West	0.0 (2.3)	0.0 (5.9)	0.0 (6.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 16
NERVOUS SYSTEM INFECTION EXCEPT VIRAL MENINGITIS
DRG(S): 20

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	7.3 (1.5)	18.3 (3.6)	20.3 (3.1)
Northeast	15.2 (3.3)	8.1 (7.4)	26.8 (5.8)
North Central	4.5 (3.5)	29.9 (10.2)	12.0 (6.9)
South	5.1 (2.4)	21.4 (5.1)	28.2 (6.0)
West	5.9 (3.4)	13.8 (10.1)	10.9 (6.4)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.4 (1.2)	1.9 (4.2)	1.6 (4.9)
Northeast	1.8 (3.2)	37.3 (18.3)	0.0 (11.3)
North Central	0.0 (2.5)	0.0 (8.3)	7.8 (10.8)
South	0.2 (1.9)	0.0 (5.4)	0.0 (8.1)
West	0.0 (2.8)	0.0 (12.3)	0.0 (10.1)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 17
VIRAL MENINGITIS
DRG(S): 21

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.8 (2.1)	21.5 (9.3)	0.0 (11.0)
Northeast	0.0 (4.8)	0.0 (19.6)	** (**)
North Central	0.0 (4.0)	** (**)	** (**)
South	5.3 (3.6)	48.4 (13.9)	** (**)
West	0.0 (4.7)	** (**)	0.0 (15.8)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (1.0)	0.0 (11.6)	** (**)
Northeast	0.0 (2.2)	-- (--)	** (**)
North Central	0.3 (2.1)	** (**)	** (**)
South	0.0 (1.5)	0.0 (17.1)	-- (--)
West	0.0 (2.3)	** (**)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 18
HYPERTENSIVE ENCEPHALOPATHY
DRG(S): 22

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.3 (1.9)	1.8 (2.6)	4.0 (2.4)
Northeast	0.0 (6.1)	0.0 (8.8)	10.3 (7.3)
North Central	1.0 (3.8)	4.8 (5.2)	4.4 (4.7)
South	1.0 (2.7)	1.4 (3.7)	0.8 (3.5)
West	4.2 (5.5)	0.0 (6.6)	8.6 (6.1)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.8)	0.0 (2.8)	0.0 (3.3)
Northeast	0.0 (5.8)	0.0 (10.7)	0.0 (8.3)
North Central	0.0 (3.3)	0.0 (5.3)	0.0 (6.6)
South	0.0 (2.5)	0.0 (3.8)	0.0 (5.5)
West	0.0 (5.0)	0.0 (7.9)	0.0 (6.5)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 19
NONTRAUMATIC STUPOR & COMA
DRG(S): 23

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	16.6 (3.2)	14.6 (3.9)	19.0 (3.4)
Northeast	4.1 (7.8)	10.4 (12.5)	46.2 (10.0)
North Central	10.4 (5.8)	10.6 (7.1)	17.9 (6.1)
South	22.4 (5.3)	14.0 (5.3)	9.0 (5.6)
West	26.7 (7.4)	40.3 (14.1)	23.2 (7.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	1.0 (3.9)	0.0 (9.1)	0.0 (5.9)
Northeast	0.0 (8.6)	** (**)	0.0 (14.6)
North Central	0.0 (8.8)	** (**)	0.0 (9.9)
South	2.7 (6.4)	0.0 (10.6)	0.0 (10.2)
West	0.0 (8.0)	** (**)	0.0 (16.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 20
SEIZURE AND HEADACHE
DRG(S): 24, 25, 26

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.5 (0.5)	3.3 (1.1)	5.2 (1.0)	U.S.	0.0 (0.3)	0.2 (1.3)	0.7 (1.4)
Northeast	1.6 (1.2)	4.3 (2.4)	6.3 (2.1)	Northeast	0.0 (0.8)	0.6 (2.7)	0.0 (3.1)
North Central	1.0 (0.9)	2.9 (2.2)	4.3 (2.1)	North Central	0.0 (0.6)	0.4 (2.5)	0.0 (2.9)
South	2.2 (0.9)	3.3 (1.7)	5.1 (1.5)	South	0.1 (0.5)	0.0 (2.1)	1.5 (2.2)
West	0.6 (1.5)	2.6 (2.6)	5.0 (2.4)	West	0.0 (1.0)	0.0 (3.4)	0.7 (3.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 21
TRAUMATIC STUPOR & COMA, COMA >1 HOUR
DRG(S): 27

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	14.9 (1.8)	30.4 (5.9)	30.1 (4.3)
Northeast	15.7 (4.6)	18.3 (9.7)	40.9 (8.7)
North Central	14.3 (3.5)	28.1 (11.8)	24.4 (8.5)
South	12.4 (2.8)	56.0 (12.8)	32.1 (6.9)
West	19.8 (3.9)	27.9 (14.4)	15.8 (11.8)

Region	Without CCs Age <65	 65-74	 75+
U.S.	16.4 (2.1)	40.3 (12.2)	32.7 (7.4)
Northeast	13.1 (5.4)	** (**)	50.0 (19.3)
North Central	16.2 (4.4)	30.3 (14.4)	38.4 (16.9)
South	16.2 (3.2)	** (**)	11.4 (10.8)
West	20.1 (5.3)	-- (--)	63.9 (16.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ――― Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ――― Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 22
TRAUMATIC STUPOR & COMA, COMA <1 HOUR
DRG(S): 28, 29, 30

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.3 (1.0)	13.4 (2.7)	6.8 (2.1)
Northeast	0.0 (2.4)	30.2 (5.4)	7.5 (4.0)
North Central	0.5 (1.9)	2.2 (5.2)	5.5 (4.5)
South	2.9 (1.6)	10.0 (5.0)	7.8 (3.4)
West	0.4 (2.4)	12.8 (6.8)	4.7 (5.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	2.8 (4.6)	7.4 (3.0)
Northeast	0.0 (1.8)	5.5 (9.0)	6.6 (7.7)
North Central	0.1 (1.4)	3.9 (7.6)	2.0 (5.5)
South	0.0 (1.2)	0.0 (8.8)	8.7 (4.7)
West	0.0 (1.9)	0.0 (13.3)	14.4 (7.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 23
CONCUSSION
DRG(S): 31, 32, 33

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.1)	2.9 (3.3)	2.4 (2.5)
Northeast	0.0 (2.1)	0.0 (6.8)	2.9 (4.4)
North Central	0.0 (2.0)	0.0 (6.2)	7.1 (5.5)
South	0.0 (2.0)	0.0 (6.1)	0.2 (4.6)
West	0.0 (2.6)	15.5 (7.6)	0.0 (6.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.5)	0.0 (2.8)	0.0 (2.5)
Northeast	0.0 (1.1)	0.0 (5.1)	0.0 (5.2)
North Central	0.0 (1.0)	0.0 (5.9)	0.0 (5.4)
South	0.0 (0.9)	0.0 (5.0)	0.0 (4.0)
West	0.0 (1.4)	0.0 (6.6)	0.0 (6.4)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 24
OTHER DISORDERS OF NERVOUS SYSTEM
DRG(S): 34, 35

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	9.6 (1.3)	13.6 (2.0)	15.1 (2.0)
Northeast	11.5 (3.0)	22.7 (4.7)	22.0 (3.8)
North Central	12.3 (2.7)	9.6 (3.9)	13.1 (4.3)
South	6.7 (2.2)	13.1 (3.5)	11.3 (3.7)
West	10.2 (3.3)	11.7 (4.2)	13.9 (4.5)

Region	Without CCs Age <65	 65-74	 75+
U.S.	1.0 (1.1)	2.0 (3.0)	0.8 (3.4)
Northeast	1.4 (2.6)	5.9 (8.3)	0.0 (6.0)
North Central	0.9 (2.1)	0.0 (5.6)	3.1 (6.8)
South	1.1 (1.6)	1.6 (4.8)	0.0 (6.6)
West	0.3 (3.1)	3.5 (7.2)	0.0 (8.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 25
RETINAL PROCEDURES
DRG(S): 36

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.2 (1.7)	0.0 (2.6)	0.0 (3.1)
Northeast	0.0 (4.1)	0.0 (5.9)	0.0 (6.5)
North Central	0.0 (3.3)	0.0 (5.8)	0.0 (7.5)
South	0.0 (2.8)	0.0 (4.6)	0.0 (5.5)
West	1.0 (3.8)	0.0 (4.8)	0.0 (6.0)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.9)	0.0 (1.4)	0.0 (1.8)
Northeast	0.0 (2.1)	0.0 (3.2)	0.0 (4.4)
North Central	0.0 (1.8)	0.0 (2.8)	0.0 (3.7)
South	0.0 (1.5)	0.0 (2.3)	0.0 (3.3)
West	0.0 (1.8)	0.0 (3.1)	0.0 (3.6)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 26
ORBITAL PROCEDURES
DRG(S): 37

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.8)	0.0 (6.0)	2.2 (5.0)
Northeast	0.0 (5.8)	** (**)	7.1 (9.2)
North Central	0.0 (5.2)	0.0 (11.6)	0.0 (9.4)
South	0.0 (4.6)	0.0 (8.1)	0.6 (9.3)
West	0.0 (7.6)	0.0 (17.1)	0.0 (12.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.9)	0.0 (7.1)	0.0 (6.3)
Northeast	0.0 (4.0)	0.0 (12.0)	0.0 (12.3)
North Central	0.0 (3.1)	0.0 (14.0)	0.0 (11.5)
South	0.0 (3.5)	0.0 (13.9)	0.0 (10.2)
West	0.0 (4.7)	0.0 (19.1)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 27
PRIMARY IRIS PROCEDURES
DRG(S): 38

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (7.1)	0.0 (10.4)	0.0 (10.8)
Northeast	0.0 (13.7)	** (**)	** (**)
North Central	** (**)	** (**)	** (**)
South	0.0 (11.4)	0.0 (13.3)	0.0 (18.2)
West	0.0 (14.6)	** (**)	0.0 (19.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.8)	0.0 (8.8)	0.0 (6.0)
Northeast	0.0 (9.0)	** (**)	0.0 (11.[illegible])
North Central	0.0 (12.7)	0.0 (15.8)	0.0 (14.0)
South	0.0 (7.1)	0.0 (11.7)	0.0 (9.0)
West	0.0 (14.0)	** (**)	0.0 (17.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 28
LENS PROCEDURES W/ OR W/O VITRECTOMY
DRG(S): 39

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs		
	Age		
	<65	65-74	75+
U.S.	0.0 (2.6)	0.0 (1.9)	0.0 (1.6)
Northeast	0.0 (4.2)	0.0 (2.5)	0.0 (2.0)
North Central	0.0 (5.2)	0.0 (4.3)	0.0 (3.7)
South	0.0 (4.7)	0.0 (5.0)	0.0 (3.7)
West	0.0 (8.6)	0.0 (8.2)	0.0 (8.2)

Region	Without CCs		
	Age		
	<65	65-74	75+
U.S.	0.0 (1.7)	0.0 (1.7)	0.0 (1.2)
Northeast	0.0 (2.7)	0.0 (2.2)	0.0 (1.6)
North Central	0.0 (3.9)	0.0 (4.7)	0.0 (2.7)
South	0.0 (3.0)	0.0 (3.8)	0.0 (3.5)
West	0.0 (6.6)	0.0 (8.1)	0.0 (6.8)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 29
EXTRAOCULAR PROCEDURES EXCEPT ORBIT
DRG(S): 40, 41

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.9)	0.0 (5.7)	0.0 (4.9)	U.S.	0.0 (1.3)	0.0 (3.7)	0.0 (3.1)
Northeast	0.0 (6.2)	0.0 (9.7)	0.0 (9.2)	Northeast	0.0 (2.5)	0.0 (6.5)	0.0 (5.0)
North Central	0.0 (5.7)	0.0 (12.4)	0.0 (10.0)	North Central	0.0 (2.7)	0.0 (7 1)	0.0 (5.8)
South	0.0 (4.5)	0.0 (10.5)	0.0 (7.6)	South	0.0 (2.1)	0.0 (6.5)	0.0 (6.4)
West	0.0 (9.0)	0.0 (14.7)	** (**)	West	0.0 (3.8)	0.0 (12.4)	0.0 (8.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 30
INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS
DRG(S): 42

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.0)	0.0 (2.6)	1.0 (2.7)
Northeast	0.0 (4.1)	0.0 (4.8)	0.0 (5.6)
North Central	0.0 (3.6)	0.0 (4.7)	1.2 (4.2)
South	0.0 (3.3)	0.0 (4.9)	0.0 (5.5)
West	0.0 (5.7)	0.0 (7.1)	4.0 (7.7)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.1)	0.0 (1.6)	0.0 (1.4)
Northeast	0.0 (2.9)	0.0 (3.8)	0.0 (3.8)
North Central	0.0 (2.1)	0.0 (2.5)	0.0 (2.1)
South	0.0 (1.8)	0.0 (2.9)	0.0 (2.8)
West	0.0 (2.9)	0.0 (4.3)	0.0 (4.2)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 31
HYPHEMA
DRG(S): 43

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Age

Region	<65	65-74	75+
U.S.	0.0 (5.5)	** (**)	** (**)
Northeast	0.0 (10.1)	-- (--)	** (**)
North Central	0.0 (9.6)	** (**)	-- (--)
South	0.0 (10.2)	-- (--)	-- (--)
West	0.0 (19.2)	** (**)	-- (--)

Without CCs

Age

Region	<65	65-74	75+
U.S.	0.0 (1.9)	0.0 (12.3)	0.0 (19.3)
Northeast	0.0 (4.6)	** (**)	-- (--)
North Central	0.0 (3.6)	** (**)	** (**)
South	0.0 (3.1)	-- (--)	** (**)
West	0.0 (5.1)	0.0 (19.3)	** (**)

ACTUAL DEATH RATES

With CCs

Age

	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

Age

	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 32
ACUTE MAJOR EYE INFECTIONS
DRG(S): 44

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (3.4)	0.0 (9.6)	4.4 (7.1)
Northeast	0.0 (8.7)	** (**)	29.4 (18.5)
North Central	0.0 (6.1)	0.0 (17.3)	0.0 (15.7)
South	0.0 (5.7)	0.0 (15.6)	0.0 (12.9)
West	0.0 (7.5)	** (**)	0.0 (12.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.5)	0.0 (5.9)	0.0 (5.9)
Northeast	0.0 (3.5)	0.0 (15.9)	0.0 (14.0)
North Central	0.0 (2.7)	0.0 (13.9)	0.0 (12.6)
South	0.0 (2.4)	0.0 (7.6)	0.0 (10.0)
West	0.0 (3.7)	** (**)	0.0 (11.6)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 33
NEUROLOGICAL EYE DISORDERS
DRG(S): 45

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.6)	2.7 (4.8)	0.0 (5.3)
Northeast	0.0 (9.2)	0.0 (11.1)	0.0 (13.5)
North Central	0.0 (5.9)	8.6 (8.6)	0.0 (10.2)
South	0.0 (5.7)	0.0 (8.8)	0.0 (7.9)
West	0.0 (13.8)	0.0 (10.8)	0.0 (15.8)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.5)	0.0 (4.3)	9.6 (5.9)
Northeast	0.0 (6.1)	0.0 (9.2)	0.0 (13.1)
North Central	0.0 (4.7)	0.0 (8.1)	0.0 (13.5)
South	0.0 (3.7)	0.0 (8.2)	19.2 (8.4)
West	0.0 (8.3)	0.0 (9.1)	0.0 (18.0)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 34
OTHER DISORDERS OF EYE
DRG(S): 46, 47, 48

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs		
	Age		
	<65	65-74	75+
U.S.	1.1 (2.2)	0.9 (3.6)	3.7 (3.3)
Northeast	0.0 (5.6)	0.0 (6.4)	7.7 (5.3)
North Central	0.0 (3.8)	2.5 (6.1)	0.0 (7.5)
South	2.8 (3.5)	0.0 (7.6)	2.2 (5.7)
West	0.0 (6.6)	0.0 (11.3)	0.0 (10.4)

Region	Without CCs		
	Age		
	<65	65-74	75+
U.S.	0.1 (1.5)	0.0 (3.7)	0.9 (3.6)
Northeast	0.0 (3.5)	0.0 (7.1)	0.0 (7.4)
North Central	0.2 (3.0)	0.0 (8.8)	3.2 (6.9)
South	0.0 (2.3)	0.0 (5.6)	0.0 (6.0)
West	0.7 (3.9)	0.0 (10.0)	0.0 (10.8)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 35
MAJOR HEAD & NECK PROCEDURES
DRG(S): 49

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	2.8 (2.3)	5.4 (2.7)	2.3 (4.2)
Northeast	2.9 (4.4)	4.5 (5.1)	0.0 (11.7)
North Central	0.0 (4.3)	3.5 (5.3)	9.7 (8.5)
South	5.8 (4.5)	2.7 (5.1)	0.0 (6.0)
West	2.7 (6.4)	13.3 (6.3)	0.0 (10.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.3)	0.0 (3.4)	0.0 (6.3)
Northeast	0.0 (6.4)	0.0 (7.5)	0.0 (12.8)
North Central	0.0 (4.7)	0.0 (8.0)	0.0 (13.9)
South	0.0 (3.4)	0.0 (4.7)	0.0 (10.7)
West	0.0 (5.9)	0.0 (10.2)	0.0 (14.0)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 36
SIALOADENECTOMY
DRG(S): 50

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (4.3)	0.0 (4.0)	3.2 (7.0)
Northeast	0.0 (7.9)	0.0 (7.4)	0.0 (14.6)
North Central	0.0 (7.8)	0.0 (8.8)	9.5 (11.9)
South	0.0 (8.7)	0.0 (7.2)	0.0 (13.4)
West	0.0 (10.5)	0.0 (8.7)	0.0 (17.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.3)	0.0 (2.7)	0.0 (3.8)
Northeast	0.0 (2.8)	0.0 (6.0)	0.0 (7.7)
North Central	0.0 (2.5)	0.0 (4.8)	0.0 (6.5)
South	0.0 (2.3)	0.0 (5.3)	0.0 (7.5)
West	0.0 (3.0)	0.0 (5.6)	0.0 (9.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 37
SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY
DRG(S): 51

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	65-74	75+
U.S.	0.0 (15.0)	0.0 (15.8)	0.0 (13.9)
Northeast	-- (--)	** (**)	** (**)
North Central	** (**)	0.0 (19.3)	** (**)
South	** (**)	-- (--)	0.0 (20.0)
West	-- (--)	** (**)	-- (--)

Without CCs

Region	Age <65	65-74	75+
U.S.	0.0 (3.3)	0.0 (7.2)	0.0 (13.6)
Northeast	0.0 (7.0)	0.0 (10.1)	** (**)
North Central	0.0 (6.3)	0.0 (13.0)	0.0 (17.3)
South	0.0 (5.6)	0.0 (19.4)	** (**)
West	0.0 (8.5)	** (**)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 38
CLEFT LIP & PALATE REPAIR
DRG(S): 52

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs			Region	Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
U.S.	0.0 (7.1)	** (**)	-- (--)	U.S.	0.0 (1.6)	0.0 (15.8)	-- (--)
Northeast	0.0 (16.2)	-- (--)	-- (--)	Northeast	0.0 (3.5)	-- (--)	-- (--)
North Central	0.0 (11.5)	-- (--)	-- (--)	North Central	0.0 (2.9)	0.0 (19.3)	-- (--)
South	0.0 (13.0)	** (**)	-- (--)	South	0.0 (2.9)	** (**)	-- (--)
West	0.0 (19.8)	-- (--)	-- (--)	West	0.0 (4.3)	** (**)	-- (--)

ACTUAL DEATH RATES

	With CCs				Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 39
SINUS & MASTOID PROCEDURES
DRG(S): 53, 54

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	1.7 (2.2)	0.0 (3.5)	0.0 (5.3)
Northeast	0.0 (4.5)	0.0 (8.3)	0.0 (11.3)
North Central	2.4 (4.2)	0.0 (6.6)	0.0 (9.8)
South	3.3 (3.8)	0.0 (5.4)	0.0 (9.1)
West	0.0 (5.1)	0.0 (9.8)	0.0 (13.8)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.1 (0.6)	0.0 (2.0)	0.0 (3.1)
Northeast	0.0 (1.5)	0.0 (4.7)	0.0 (6.9)
North Central	0.0 (1.2)	0.0 (3.9)	0.0 (5.8)
South	0.2 (1.0)	0.0 (3.2)	0.0 (5.2)
West	0.0 (1.5)	0.0 (4.6)	0.0 (8.0)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 40
MISCELLANEOUS EAR, NOSE & THROAT PROCEDURES
DRG(S): 55

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.3 (2.0)	1.5 (4.1)	0.0 (5.3)	U.S.	0.0 (0.5)	0.0 (2.0)	0.0 (3.4)
Northeast	0.0 (4.2)	5.4 (8.8)	0.0 (12.7)	Northeast	0.0 (1.1)	0.0 (3.9)	0.0 (7.5)
North Central	0.0 (3.8)	0.0 (6.5)	0.0 (9.4)	North Central	0.1 (0.9)	0.0 (3.4)	0.0 (6.1)
South	3.4 (3.3)	0.5 (8.8)	0.0 (9.3)	South	0.0 (0.9)	0.0 (3.9)	0.0 (5.4)
West	0.0 (6.1)	0.0 (9.9)	0.0 (12.6)	West	0.0 (1.4)	0.0 (5.0)	0.0 (10.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 41
RHINOPLASTY
DRG(S): 56

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.1)	0.0 (13.3)	0.0 (10.6)
Northeast	0.0 (7.4)	-- (--)	** (**)
North Central	0.0 (8.8)	** (**)	** (**)
South	0.0 (7.1)	0.0 (16.5)	0.0 (15.6)
West	0.0 (11.3)	** (**)	** (**)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.9)	0.0 (4.6)	0.0 (7.1)
Northeast	0.0 (1.6)	0.0 (9.8)	0.0 (13.6)
North Central	0.0 (1.7)	0.0 (9.3)	** (**)
South	0.0 (1.4)	0.0 (7.9)	0.0 (9.6)
West	0.0 (2.8)	0.0 (10.2)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 42
T&A PROC. EXCEPT TONSILLECTOMY & ADENOIDECTOMY
DRG(S): 57, 58

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (2.4)	7.1 (8.9)	0.0 (10.8)
Northeast	0.0 (4.9)	14.6 (13.3)	** (**)
North Central	0.0 (4.5)	0.0 (14.8)	** (**)
South	0.0 (4.2)	** (**)	0.0 (14.0)
West	0.0 (6.5)	** (**)	** (**)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.0 (10.5)	0.0 (8.1)
Northeast	0.0 (1.7)	0.0 (17.2)	** (**)
North Central	0.0 (1.6)	** (**)	** (**)
South	0.0 (1.2)	0.0 (18.8)	0.0 (9.4)
West	0.0 (2.6)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 43
TONSILLECTOMY & ADENOIDECTOMY PROCEDURES
DRG(S): 59, 60

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.4 (2.3)	** (**)	** (**)	U.S.	0.0 (0.4)	0.0 (11.5)	0.0 (15.3)
Northeast	0.0 (5.0)	-- (--)	-- (--)	Northeast	0.0 (0.8)	** (**)	** (**)
North Central	0.0 (4.4)	** (**)	** (**)	North Central	0.0 (0.7)	0.0 (16.7)	** (**)
South	0.0 (4.2)	** (**)	-- (--)	South	0.0 (0.6)	** (**)	** (**)
West	1.6 (4.8)	-- (--)	-- (--)	West	0.0 (1.1)	0.0 (1[illegible].5)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+		Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷	No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 44
MYRINGOTOMY W/ TUBE INSERTION
DRG(S): 61, 62

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (6.0)	** (**)	0.0 (19.6)
Northeast	** (**)	-- (--)	-- (--)
North Central	0.0 (13.2)	** (**)	** (**)
South	0.0 (7.4)	-- (--)	** (**)
West	** (**)	-- (--)	** (**)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (2.9)	0.0 (18.5)	** (**)
Northeast	0.0 (7.4)	** (**)	** (**)
North Central	0.0 (6.8)	-- (--)	** (**)
South	0.0 (4.0)	** (**)	-- (--)
West	0.0 (9.2)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 45
OTHER EAR, NOSE & THROAT O.R. PROCEDURES
DRG(S): 63

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	2.3 (2.9)	8.6 (3.9)	7.6 (5.0)	**U.S.**	0.0 (1.6)	0.0 (3.6)	0.0 (4.9)
Northeast	0.0 (6.6)	6.6 (7.7)	0.0 (9.1)	**Northeast**	0.0 (3.8)	0.0 (12.0)	0.0 (11.0)
North Central	1.6 (5.2)	5.3 (8.1)	20.8 (8.3)	**North Central**	0.0 (3.2)	0.0 (8.1)	0.0 (10.1)
South	5.2 (4.9)	9.6 (6.8)	0.0 (10.6)	**South**	0.0 (2.6)	0.0 (4.8)	0.0 (7.0)
West	0.0 (6.9)	14.7 (9.7)	0.0 (15.2)	**West**	0.0 (3.6)	0.0 (9.4)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷	**No. of Patients Who died** **Total No. Patients**	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				**% Patients Who Died**			

DRG CLUSTER: 46
EAR, NOSE & THROAT MALIGNANCY
DRG(S): 64

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	21.2 (2.2)	21.9 (3.1)	25.3 (3.4)
Northeast	25.1 (4.6)	24.3 (5.4)	24.0 (6.5)
North Central	13.5 (4.0)	21.1 (6.7)	16.8 (8.7)
South	16.2 (4.0)	19.6 (4.9)	25.4 (5.1)
West	40.3 (5.6)	26.2 (11.4)	38.8 (9.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	4.4 (2.8)	13.2 (4.5)	8.8 (6.0)
Northeast	6.0 (5.2)	6.7 (10.0)	16.9 (9.7)
North Central	3.3 (4.9)	14.2 (8.9)	8.8 (11.5)
South	5.3 (5.0)	20.4 (7.2)	0.0 (13.6)
West	0.0 (9.5)	0.0 (12.5)	0.0 (15.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 47
DYSEQUILBRIUM
DRG(S): 65

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	0.0 (1.6)	0.2 (1.6)	0.2 (1.6)
Northeast	0.0 (3.6)	0.0 (4.3)	0.0 (4.1)
North Central	0.0 (3.3)	0.0 (3.0)	0.7 (3.2)
South	0.0 (2.5)	0.5 (2.6)	0.0 (2.8)
West	0.0 (3.8)	0.0 (3.8)	0.0 (3.3)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (1.0)	0.0 (1.4)	0.0 (1.6)
Northeast	0.0 (2.4)	0.0 (3.0)	0.0 (3.6)
North Central	0.0 (1.8)	0.0 (2.6)	0.0 (3.1)
South	0.0 (1.4)	0.0 (2.3)	0.0 (2.6)
West	0.0 (2.9)	0.0 (3.8)	0.0 (3.5)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 48
EPISTAXIS
DRG(S): 66

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.3 (2.2)	1.1 (2.9)	3.5 (2.6)	U.S.	0.0 (1.6)	0.0 (2.8)	0.0 (2.7)
Northeast	0.0 (4.4)	0.0 (5.7)	8.8 (5.7)	Northeast	0.0 (3.6)	0.0 (5.9)	0.0 (5.4)
North Central	0.0 (4.0)	2.5 (6.1)	3.1 (4.8)	North Central	0.0 (3.2)	0.0 (5.5)	0.0 (4.9)
South	1.1 (4.1)	0.0 (4.8)	1.4 (4.4)	South	0.0 (2.5)	0.0 (4.7)	0.0 (4.6)
West	0.0 (5.3)	4.1 (7.8)	0.0 (6.9)	West	0.0 (4.0)	0.0 (7.1)	0.0 (7.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 49
EPIGLOTTITIS
DRG(S): 67

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (5.0)	0.0 (14.9)	0.0 (17.3)
Northeast	0.0 (10.1)	-- (--)	** (**)
North Central	0.0 (13.3)	** (**)	** (**)
South	0.0 (8.5)	0.0 (20.0)	-- (--)
West	0.0 (9.3)	** (**)	** (**)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.7)	0.0 (9.9)	0.0 (17.4)
Northeast	0.0 (5.6)	-- (--)	** (**)
North Central	0.0 (5.3)	0.0 (14.1)	-- (--)
South	0.0 (4.7)	0.0 (18.8)	-- (--)
West	0.0 (5.8)	** (**)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 50
OTITIS MEDIA & URI
DRG(S): 68, 69, 70

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.3 (0.6)	1.3 (1.9)	0.5 (1.8)	U.S.	0.0 (0.5)	0.0 (2.6)	2.7 (2.9)
Northeast	0.0 (1.8)	3.0 (5.4)	1.6 (4.1)	Northeast	0.0 (1.2)	0.0 (6.3)	0.0 (10.3)
North Central	0.3 (1.2)	0.0 (4.0)	1.0 (3.8)	North Central	0.0 (0.9)	0.0 (5.5)	0.0 (6.7)
South	0.3 (0.9)	0.0 (2.7)	0.0 (2.8)	South	0.0 (0.7)	0.0 (3.6)	4.4 (3.7)
West	0.4 (1.7)	5.8 (4.7)	0.0 (4.7)	West	0.0 (1.4)	0.0 (9.3)	0.0 (8.5)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+		Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷	No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 51
LARYNGOTRACHEITIS
DRG(S): 71

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	65-74	75+
U.S.	0.0 (2.5)	-- (--)	** (**)
Northeast	0.0 (6.3)	-- (--)	-- (--)
North Central	0.0 (4.3)	-- (--)	-- (--)
South	0.0 (4.5)	-- (--)	** (**)
West	0.0 (5.1)	-- (--)	-- (--)

Without CCs

Region	Age <65	65-74	75+
U.S.	0.0 (0.7)	-- (--)	0.0 (16.5)
Northeast	0.0 (1.6)	-- (--)	-- (--)
North Central	0.0 (1.4)	-- (--)	** (**)
South	0.0 (1.4)	-- (--)	0.0 (18.3)
West	0.0 (1.6)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 52
NASAL TRAUMA & DEFORMITY
DRG(S): 72

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (3.5)	0.0 (13.4)	0.0 (10.1)
Northeast	0.0 (6.9)	** (**)	** (**)
North Central	0.0 (6.4)	** (**)	** (**)
South	0.0 (6.3)	0.0 (16.9)	0.0 (14.3)
West	0.0 (9.3)	-- (--)	** (**)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.3)	0.0 (11.8)	0.0 (8.0)
Northeast	0.0 (5.4)	** (**)	0.0 (11.6)
North Central	0.0 (4.6)	** (**)	** (**)
South	0.0 (3.4)	0.0 (16.8)	0.0 (13.6)
West	0.0 (6.0)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 53
OTHER EAR, NOSE & THROAT DIAGNOSES
DRG(S): 73, 74

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	3.2 (1.8)	7.0 (2.9)	8.7 (2.4)	U.S.	0.1 (1.1)	0.8 (3.1)	0.0 (3.4)
Northeast	2.6 (4.1)	9.5 (6.1)	3.7 (4.9)	Northeast	0.7 (2.4)	2.8 (5.7)	0.0 (7.7)
North Central	0.0 (3.5)	12.9 (5.7)	10.6 (4.8)	North Central	0.0 (2.1)	0.0 (6.5)	0.0 (7.3)
South	3.9 (3.1)	1.5 (4.7)	10.7 (3.8)	South	0.0 (1.7)	0.0 (5.4)	0.0 (5.0)
West	7.0 (4.2)	7.0 (8.1)	8.4 (5.9)	West	0.0 (2.6)	0.0 (8.7)	0.0 (8.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 54
MAJOR CHEST PROCEDURES
DRG(S): 75

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	6.8 (0.8)	8.5 (1.1)	16.7 (1.6)
Northeast	7.4 (1.5)	10.0 (2.2)	20.7 (3.0)
North Central	6.9 (1.6)	10.0 (2.2)	13.5 (3.4)
South	6.0 (1.4)	8.0 (1.8)	18.6 (2.9)
West	7.2 (1.9)	5.9 (2.4)	11.9 (3.5)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.5 (1.1)	0.5 (1.9)	2.1 (3.2)
Northeast	0.8 (2.4)	0.0 (3.9)	0.0 (8.7)
North Central	0.3 (2.2)	1.9 (4.0)	6.8 (5.8)
South	0.6 (1.8)	0.0 (3.3)	0.0 (5.7)
West	0.0 (2.6)	0.6 (4.2)	0.0 (6.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 55
OTHER RESPIRATORY SYSTEM O.R. PROCEDURES
DRG(S): 76, 77

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs			Region	Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
U.S.	7.3 (1.3)	16.6 (1.5)	32.9 (2.1)	U.S.	0.7 (1.7)	1.6 (3.5)	3.5 (4.7)
Northeast	5.7 (2.7)	21.3 (3.1)	39.2 (3.4)	Northeast	1.7 (3.6)	0.0 (6.4)	0.0 (8.4)
North Central	7.6 (2.6)	10.8 (3.1)	33.3 (4.7)	North Central	0.0 (4.0)	7.1 (7.3)	5.8 (9.3)
South	6.8 (2.2)	15.7 (2.5)	32.9 (4.1)	South	0.5 (2.4)	0.0 (6.5)	6.4 (8.4)
West	10.4 (3.4)	20.5 (4.1)	19.5 (4.8)	West	0.0 (5.3)	0.0 (8.2)	0.0 (13.9)

ACTUAL DEATH RATES

	With CCs				Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
No. of Patients Who died	÷	÷	÷	No. of Patients Who died	÷	÷	÷
Total No. Patients				Total No. Patients			
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 56
PULMONARY EMBOLISM
DRG(S): 78

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	6.5 (1.3)	12.8 (1.4)	15.8 (1.3)
Northeast	4.5 (3.1)	12.7 (3.3)	19.9 (2.8)
North Central	5.2 (2.4)	11.5 (2.9)	15.9 (2.3)
South	11.1 (2.1)	17.8 (2.3)	14.8 (2.4)
West	1.9 (2.9)	5.7 (3.1)	12.1 (3.2)

Region	Without CCs Age <65	 65-74	 75+
U.S.	1.2 (1.4)	2.9 (2.3)	3.2 (2.5)
Northeast	2.0 (3.1)	1.8 (4.6)	13.3 (5.4)
North Central	0.5 (2.7)	5.8 (4.1)	1.5 (4.7)
South	1.3 (2.4)	2.6 (4.4)	0.2 (4.5)
West	1.3 (3.1)	0.2 (5.3)	0.0 (5.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 57
RESP. INFECTIONS & INFLAMMATIONS
DRG(S): 79, 80, 81

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	13.0 (0.7)	20.8 (0.8)	26.1 (0.6)
Northeast	16.1 (1.3)	22.0 (1.8)	29.3 (1.2)
North Central	13.4 (1.5)	20.4 (1.8)	22.9 (1.1)
South	9.7 (1.2)	21.0 (1.3)	27.4 (0.9)
West	13.7 (1.7)	19.8 (1.9)	23.8 (1.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.8 (1.2)	5.0 (2.2)	12.6 (1.5)
Northeast	1.3 (2.6)	10.0 (6.0)	22.4 (3.6)
North Central	0.9 (2.6)	5.4 (4.5)	11.1 (3.2)
South	0.0 (2.0)	3.5 (3.2)	8.0 (2.3)
West	1.7 (3.0)	4.4 (5.7)	16.0 (3.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 58
RESPIRATORY NEOPLASMS
DRG(S): 82

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	30.8 (0.6)	32.3 (0.7)	35.0 (0.8)	U.S.	14.7 (1.4)	22.7 (1.6)	22.9 (2.1)
Northeast	30.2 (1.3)	32.1 (1.4)	35.5 (1.5)	Northeast	9.8 (2.8)	17.1 (3.3)	12.2 (4.6)
North Central	30.3 (1.2)	31.1 (1.3)	34.1 (1.5)	North Central	13.5 (2.6)	21.7 (3.4)	24.0 (3.9)
South	31.6 (1.0)	33.6 (1.1)	35.2 (1.4)	South	19.2 (2.2)	25.3 (2.5)	31.8 (3.5)
West	30.6 (1.5)	31.1 (1.8)	35.2 (2.1)	West	13.1 (4.2)	26.6 (4.8)	14.5 (5.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 59
MAJOR CHEST TRAUMA
DRG(S): 83, 84

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.8 (1.5)	1.2 (2.5)	3.7 (2.0)
Northeast	1.5 (3.6)	2.1 (5.6)	2.5 (4.3)
North Central	1.0 (3.0)	1.7 (5.0)	3.0 (3.5)
South	1.9 (2.5)	0.0 (4.1)	5.5 (3.4)
West	2.0 (3.5)	2.0 (5.5)	3.1 (4.8)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.9)	0.0 (3.7)	0.0 (3.0)
Northeast	0.0 (4.4)	0.0 (8.8)	0.0 (5.9)
North Central	0.0 (4.1)	0.0 (7.4)	0.0 (5.4)
South	0.0 (2.9)	0.0 (6.0)	0.0 (5.7)
West	0.0 (4.4)	0.0 (8.3)	0.0 (8.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died			
	+	+	+
Total No. Patients			
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died			
	+	+	+
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 60
PLEURAL EFFUSION
DRG(S): 85, 86

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	8.5 (1.8)	6.8 (1.8)	8.4 (1.6)
Northeast	11.8 (3.7)	7.8 (3.6)	16.1 (3.4)
North Central	7.7 (3.5)	11.6 (4.1)	7.3 (3.0)
South	10.8 (3.1)	5.8 (3.0)	6.2 (2.7)
West	0.4 (4.4)	1.6 (4.4)	4.5 (3.8)

Region	Without CCs Age <65	 65-74	 75+
U.S.	3.7 (2.3)	0.0 (3.8)	0.0 (3.7)
Northeast	0.0 (5.1)	0.0 (8.4)	0.0 (7.7)
North Central	2.1 (5.6)	0.0 (9.4)	0.0 (8.3)
South	6.3 (3.2)	0.0 (5.7)	0.0 (6.4)
West	0.0 (7.1)	0.0 (8.5)	0.0 (7.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 61
PULMONARY EDEMA & RESPIRATORY FAILURE
DRG(S): 87

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	15.7 (1.1)	19.1 (1.2)	24.9 (1.1)
Northeast	20.8 (2.4)	24.2 (2.4)	27.9 (2.4)
North Central	16.0 (2.0)	18.0 (2.4)	24.6 (2.1)
South	14.4 (1.8)	17.6 (1.9)	20.8 (1.9)
West	11.2 (2.9)	17.0 (2.8)	29.8 (2.7)

Region	Without CCs Age <65	 65-74	 75+
U.S.	6.1 (2.7)	15.2 (3.4)	6.5 (2.8)
Northeast	0.0 (7.3)	0.0 (7.8)	0.0 (5.5)
North Central	7.0 (5.9)	27.2 (7.8)	3.8 (5.3)
South	4.1 (4.0)	16.8 (4.9)	10.9 (4.7)
West	14.4 (6.3)	14.4 (8.4)	13.5 (8.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 62
CHRONIC OBSTRUCTIVE PULMONARY DISEASE
DRG(S): 88

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	6.4 (0.8)	8.9 (0.7)	12.0 (0.8)	U.S.	0.6 (0.9)	2.2 (0.9)	3.7 (1.2)
Northeast	6.7 (1.7)	8.9 (1.4)	12.3 (1.5)	Northeast	0.7 (1.8)	1.2 (1.9)	1.6 (2.1)
North Central	5.7 (1.5)	7.9 (1.4)	9.7 (1.6)	North Central	0.5 (1.7)	2.5 (1.9)	3.5 (2.4)
South	7.7 (1.3)	8.5 (1.2)	13.8 (1.5)	South	0.4 (1.4)	2.1 (1.6)	7.6 (2.1)
West	3.9 (2.0)	11.0 (1.7)	11.9 (2.0)	West	1.3 (2.5)	3.5 (2.2)	1.0 (2.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 63
SIMPLE PNEUMONIA & PLEURISY
DRG(S): 89, 90, 91

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	4.5 (0.4)	8.7 (0.4)	15.0 (0.3)	U.S.	0.2 (0.3)	2.4 (0.9)	4.5 (0.7)
Northeast	5.6 (0.8)	9.0 (1.0)	16.9 (0.7)	Northeast	0.0 (0.8)	1.3 (2.2)	3.6 (1.6)
North Central	4.1 (0.7)	8.9 (0.9)	14.3 (0.6)	North Central	0.1 (0.5)	3.9 (1.8)	3.3 (1.3)
South	4.1 (0.6)	8.3 (0.7)	15.8 (0.5)	South	0.4 (0.4)	1.4 (1.4)	5.0 (1.1)
West	4.8 (0.9)	9.1 (1.1)	11.9 (0.8)	West	0.1 (0.8)	3.5 (2.3)	6.5 (1.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 64
INTERSTITIAL LUNG DISEASE
DRG(S): 92, 93

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	7.0 (1.5)	14.9 (2.3)	16.6 (1.9)
Northeast	8.7 (3.2)	15.7 (5.3)	21.1 (4.3)
North Central	3.9 (3.1)	12.6 (4.3)	20.6 (4.1)
South	8.4 (2.4)	15.1 (3.5)	13.3 (3.0)
West	5.1 (4.9)	18.4 (6.8)	14.1 (4.6)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	1.7 (2.0)	2.4 (3.7)	1.9 (3.8)
Northeast	1.3 (4.0)	0.0 (6.6)	3.0 (6.7)
North Central	1.1 (4.0)	0.0 (7.6)	3.4 (7.1)
South	2.3 (3.5)	0.0 (6.2)	0.0 (7.7)
West	1.9 (5.3)	23.8 (11.5)	0.0 (9.6)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 65
PNEUMOTHORAX
DRG(S): 94, 95

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.0 (1.3)	4.1 (2.2)	15.5 (2.3)
Northeast	0.6 (2.9)	3.7 (5.2)	11.5 (4.6)
North Central	2.3 (2.6)	6.4 (4.1)	22.0 (4.6)
South	0.0 (2.1)	2.7 (3.6)	14.1 (3.8)
West	2.2 (3.3)	3.7 (4.8)	14.6 (5.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.0)	2.1 (4.3)	1.7 (5.0)
Northeast	0.0 (2.1)	11.6 (10.2)	8.0 (11.0)
North Central	0.0 (2.0)	0.0 (9.1)	0.0 (11.9)
South	0.0 (1.5)	0.0 (6.2)	0.0 (7.3)
West	0.0 (2.4)	0.0 (13.2)	0.0 (13.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 66
BRONCHITIS & ASTHMA
DRG(S): 96, 97, 98

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.6 (0.4)	1.9 (0.5)	3.1 (0.5)
Northeast	0.8 (0.8)	1.6 (1.1)	2.6 (1.2)
North Central	0.5 (0.7)	1.7 (1.0)	2.8 (1.1)
South	0.5 (0.6)	2.4 (0.7)	3.4 (0.8)
West	0.8 (0.9)	1.5 (1.1)	3.3 (1.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.2)	0.2 (0.9)	0.2 (1.0)
Northeast	0.0 (0.5)	0.2 (1.9)	0.5 (2.3)
North Central	0.0 (0.5)	0.0 (1.7)	0.3 (2.2)
South	0.0 (0.4)	0.3 (1.3)	0.0 (1.6)
West	0.0 (0.6)	0.0 (2.3)	0.0 (2.9)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 67
RESPIRATORY SIGNS & SYMPTOMS
DRG(S): 99, 100

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.4 (0.9)	3.6 (1.4)	4.5 (1.5)
Northeast	1.6 (2.3)	3.6 (3.8)	4.9 (3.6)
North Central	2.0 (1.8)	6.4 (2.7)	4.3 (3.0)
South	1.2 (1.4)	2.6 (2.2)	3.5 (2.3)
West	0.5 (2.6)	1.3 (3.4)	6.9 (3.5)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (0.6)	0.6 (1.7)	0.5 (2.1)
Northeast	0.3 (1.8)	1.3 (4.4)	0.0 (5.4)
North Central	0.0 (1.1)	0.7 (3.2)	0.0 (4.1)
South	0.1 (1.0)	0.5 (2.6)	1.2 (3.2)
West	0.0 (1.8)	0.0 (4.3)	0.0 (5.1)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 68
OTHER RESPIRATORY SYSTEM DXS
DRG(S): 101, 102

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	65-74	75+	Region	Without CCs Age <65	65-74	75+
U.S.	5.8 (0.9)	9.6 (1.1)	17.6 (1.1)	U.S.	0.2 (1.0)	2.0 (2.5)	2.6 (2.4)
Northeast	7.7 (2.0)	10.1 (2.4)	19.3 (2.4)	Northeast	0.0 (2.6)	8.4 (5.9)	4.4 (5.7)
North Central	5.0 (1.8)	9.5 (2.1)	22.7 (2.3)	North Central	0.1 (2.0)	0.0 (5.2)	2.8 (4.6)
South	5.6 (1.4)	9.3 (1.9)	15.2 (2.0)	South	0.3 (1.6)	1.1 (3.7)	0.0 (3.8)
West	4.9 (2.1)	9.8 (2.7)	13.0 (2.6)	West	0.4 (2.6)	0.0 (7.8)	6.6 (5.9)

ACTUAL DEATH RATES

	With CCs Age <65	65-74	75+		Without CCs Age <65	65-74	75+
No. of Patients Who died				No. of Patients Who died			
	÷	÷	÷		÷	÷	÷
Total No. Patients				Total No. Patients			
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 69
HEART TRANSPLANT
DRG(S): 103

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs		
	Age		
	<65	65-74	75+
U.S.	18.8 (4.8)	-- (--)	-- (--)
Northeast	** (**)	-- (--)	-- (--)
North Central	30.3 (10.0)	-- (--)	-- (--)
South	10.9 (5.7)	-- (--)	-- (--)
West	** (**)	-- (--)	-- (--)

Region	Without CCs		
	Age		
	<65	65-74	75+
U.S.	0.0 (7.5)	-- (--)	-- (--)
Northeast	** (**)	-- (--)	-- (--)
North Central	0.0 (16.4)	-- (--)	-- (--)
South	0.0 (9.5)	-- (--)	-- (--)
West	0.0 (19.2)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 70
CARDIAC VALVE PROCEDURES W/ PUMP & W/ CARDIAC CATH.
DRG(S): 104

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	10.4 (1.8)	17.2 (2.0)	19.7 (2.6)
Northeast	13.8 (4.8)	10.7 (5.9)	5.4 (9.0)
North Central	6.2 (3.6)	30.0 (3.4)	17.0 (4.9)
South	16.8 (3.3)	12.3 (4.2)	12.5 (5.1)
West	6.3 (3.1)	7.3 (3.9)	29.8 (4.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	5.1 (4.2)	0.0 (6.1)	6.8 (10.0)
Northeast	0.0 (12.8)	0.0 (19.3)	** (**)
North Central	3.9 (7.6)	0.0 (9.0)	** (**)
South	7.8 (5.8)	0.0 (13.7)	0.0 (15.8)
West	0.0 (14.1)	0.0 (12.8)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 71
CARDIAC VALVE PROCEDURES W/ PUMP & W/O CARDIAC CATH.
DRG(S): 105

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	7.6 (1.4)	10.5 (1.7)	12.2 (2.7)
Northeast	6.5 (3.2)	17.2 (4.2)	4.9 (8.6)
North Central	13.0 (3.0)	17.0 (4.0)	12.1 (5.7)
South	6.8 (3.1)	7.4 (3.9)	17.9 (6.4)
West	5.7 (2.1)	6.6 (2.6)	11.6 (3.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.6 (2.8)	6.8 (4.7)	0.0 (7.5)
Northeast	0.0 (8.3)	16.9 (10.6)	0.0 (17.3)
North Central	1.5 (4.3)	5.0 (7.9)	0.0 (15.5)
South	0.0 (5.7)	11.5 (12.5)	0.0 (18.8)
West	0.0 (5.8)	0.0 (8.5)	0.0 (11.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 72
CORONARY BYPASS W/ CARDIAC CATH.
DRG(S): 106

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	3.9 (0.7)	8.2 (0.8)	12.8 (1.5)
Northeast	3.4 (1.7)	8.1 (2.0)	13.9 (3.5)
North Central	4.9 (1.3)	12.2 (1.5)	12.7 (2.7)
South	2.4 (1.5)	8.4 (1.7)	9.9 (3.1)
West	4.4 (1.4)	3.7 (1.6)	14.2 (2.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	1.9 (1.2)	0.8 (1.7)	0.8 (3.5)
Northeast	0.0 (3.7)	1.8 (4.5)	0.0 (13.9)
North Central	0.9 (1.8)	1.0 (2.5)	0.0 (4.9)
South	5.3 (2.4)	0.1 (3.6)	0.0 (6.6)
West	1.0 (2.8)	0.0 (4.1)	5.5 (9.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 73
CORONARY BYPASS W/O CARDIAC CATH.
DRG(S): 107

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	4.1 (0.7)	5.9 (0.9)	6.0 (1.8)
Northeast	3.7 (1.6)	5.4 (1.9)	5.7 (4.3)
North Central	3.5 (1.4)	6.5 (1.8)	10.2 (3.4)
South	5.4 (1.8)	7.4 (2.1)	8.0 (4.7)
West	4.2 (1.3)	4.8 (1.6)	2.4 (2.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.3 (1.2)	0.2 (1.8)	1.1 (4.0)
Northeast	0.0 (3.0)	0.0 (4.4)	13.2 (14.0)
North Central	0.8 (2.0)	0.6 (3.0)	0.0 (7.0)
South	0.0 (2.2)	0.0 (4.1)	0.0 (7.6)
West	0.0 (2.8)	0.0 (3.5)	0.0 (7.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 74
OTHER CARDIOTHORACIC OR VASCULAR PROCEDURES W/ PUMP
DRG(S): 108

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	13.6 (2.0)	15.5 (4.9)	26.1 (6.2)	U.S.	3.5 (2.2)	5.2 (8.8)	29.1 (12.3)
Northeast	10.4 (6.2)	0.0 (14.4)	** (**)	Northeast	2.0 (9.4)	0.0 (19.8)	-- (--)
North Central	15.0 (5.3)	26.4 (11.1)	41.0 (15.2)	North Central	6.0 (6.5)	** (**)	-- (--)
South	12.9 (2.7)	0.0 (9.1)	30.9 (10.6)	South	3.2 (2.6)	0.0 (10.9)	29.1 (12.3)
West	16.0 (4.1)	25.8 (7.6)	22.8 (9.8)	West	3.3 (5.4)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 75
OTHER CARDIOTHORACIC PROCEDURES W/O PUMP
DRG(S): 109

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	21.4 (1.6)	38.0 (2.3)	26.8 (2.7)
Northeast	26.6 (3.5)	41.0 (4.5)	27.8 (5.3)
North Central	25.2 (3.1)	40.3 (3.9)	23.1 (5.2)
South	15.8 (2.7)	26.1 (5.1)	24.8 (4.9)
West	20.4 (3.8)	42.3 (5.2)	34.7 (6.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	4.2 (2.3)	3.4 (5.0)	1.7 (5.0)
Northeast	6.2 (5.6)	0.0 (10.1)	0.2 (13.1)
North Central	1.7 (5.0)	12.4 (9.6)	3.4 (7.1)
South	5.9 (3.2)	0.0 (8.3)	0.0 (10.1)
West	0.0 (5.9)	0.0 (14.7)	0.0 (14.6)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 76
MAJOR RECONSTRUCTIVE VASCULAR PROCEDURES W/O PUMP
DRG(S): 110, 111

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	4.0 (0.9)	9.6 (0.8)	14.9 (0.9)
Northeast	3.6 (1.8)	9.7 (1.5)	13.1 (1.9)
North Central	4.1 (1.6)	9.6 (1.6)	18.8 (1.8)
South	4.2 (1.7)	10.2 (1.4)	14.0 (1.6)
West	3.9 (2.3)	8.3 (1.8)	12.8 (2.4)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.2 (1.1)	1.4 (1.3)	1.5 (1.7)
Northeast	0.0 (2.4)	1.3 (2.7)	0.0 (3.9)
North Central	0.7 (2.1)	1.3 (2.3)	2.5 (3.2)
South	0.0 (1.9)	2.5 (2.3)	2.2 (2.9)
West	0.0 (2.8)	0.0 (2.9)	0.0 (4.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 77
VASCULAR PROCEDURES EXCEPT MAJOR RECONSTRUCTION W/O PUMP
DRG(S): 112

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs		
	Age		
	<65	65-74	75+
U.S.	1.8 (0.6)	4.6 (0.8)	11.1 (1.0)
Northeast	2.5 (1.3)	5.8 (1.7)	12.8 (2.1)
North Central	1.7 (1.1)	4.3 (1.4)	12.8 (1.9)
South	2.2 (1.2)	6.7 (1.5)	11.0 (1.8)
West	1.0 (1.2)	1.8 (1.5)	7.4 (2.1)

Region	Without CCs		
	Age		
	<65	65-74	75+
U.S.	0.1 (0.6)	0.2 (0.9)	1.2 (1.6)
Northeast	0.0 (1.4)	0.0 (2.3)	0.0 (3.7)
North Central	0.0 (0.8)	0.6 (1.4)	1.7 (2.4)
South	0.6 (1.3)	0.0 (2.2)	0.0 (3.5)
West	0.0 (1.3)	0.0 (2.0)	2.1 (3.3)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 78
AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE
DRG(S): 113

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	6.8 (1.6)	7.9 (1.4)	10.9 (1.1)	U.S.	0.0 (5.5)	13.3 (5.5)	4.1 (3.2)
Northeast	8.9 (3.5)	11.0 (3.0)	11.5 (2.3)	Northeast	0.0 (15.9)	28.3 (12.1)	17.3 (8.8)
North Central	8.3 (3.3)	6.4 (2.8)	11.4 (2.0)	North Central	0.0 (11.4)	0.0 (9.1)	2.6 (5.3)
South	6.3 (2.5)	4.0 (2.4)	9.7 (1.6)	South	0.0 (7.7)	21.3 (9.4)	2.3 (5.4)
West	~~3.7~~ (3.5)	15.0 (3.7)	13.3 (3.4)	West	0.0 (14.6)	** (**)	0.0 (8.6)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 79
UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS
DRG(S): 114

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	2.9 (1.9)	2.2 (2.4)	13.8 (2.6)
Northeast	6.3 (3.8)	4.2 (5.0)	14.1 (5.2)
North Central	1.0 (3.8)	0.7 (4.4)	4.2 (5.6)
South	3.5 (3.5)	1.1 (4.0)	20.9 (4.1)
West	0.0 (4.4)	5.5 (6.3)	4.7 (8.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.3)	0.0 (8.3)	0.0 (5.7)
Northeast	0.0 (13.4)	0.0 (17.3)	0.0 (13.4)
North Central	0.0 (7.5)	0.0 (16.9)	0.0 (13.3)
South	0.0 (6.6)	0.0 (13.7)	0.0 (8.8)
West	0.0 (11.5)	** (**)	0.0 (12.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 80
PERM CARDIAC PACEMAKER IMPLANT W/ AMI, HEART FAILURE OR SHOCK
DRG(S): 115

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	18.9 (3.7)	17.7 (2.8)	12.9 (2.0)	U.S.	0.0 (16.1)	32.3 (8.5)	17.2 (9.7)
Northeast	26.6 (7.0)	18.9 (5.8)	14.3 (4.1)	Northeast	-- (--)	45.3 (15.3)	0.0 (18.7)
North Central	15.9 (7.4)	14.1 (6.3)	10.8 (4.0)	North Central	** (**)	** (**)	** (**)
South	22.1 (6.8)	21.8 (4.5)	15.1 (3.6)	South	** (**)	25.1 (11.7)	31.8 (13.1)
West	6.5 (8.4)	11.0 (6.7)	10.0 (4.7)	West	** (**)	** (**)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 81
PERM CARDIAC PACEMAKER IMPLANT W/O AMI, HEART FAILURE OR SHOCK
DRG(S): 116

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	2.4 (1.9)	1.8 (1.2)	2.4 (0.9)	U.S.	0.0 (2.2)	0.0 (1.9)	0.0 (1.3)
Northeast	6.4 (4.0)	3.8 (2.6)	3.6 (1.8)	Northeast	0.0 (5.4)	0.0 (4.2)	0.0 (3.1)
North Central	2.0 (3.8)	2.6 (2.5)	2.5 (1.7)	North Central	0.0 (4.1)	0.0 (4.3)	0.0 (2.6)
South	1.0 (3.3)	0.1 (2.0)	1.9 (1.5)	South	0.0 (3.6)	0.0 (3.1)	0.0 (2.2)
West	1.1 (4.1)	1.9 (2.7)	1.5 (2.1)	West	0.0 (4.8)	0.0 (4.3)	0.0 (3.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 82
CARDIAC PACEMAKER REPLACE & REVIS EXCEPT PULSE GENERATOR REPLACEMENT
DRG(S): 117

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.3 (4.5)	2.9 (4.7)	3.8 (3.2)
Northeast	0.0 (11.4)	0.0 (10.0)	8.2 (6.4)
North Central	7.1 (10.3)	12.0 (9.5)	8.8 (6.6)
South	0.0 (12.0)	0.0 (10.2)	0.0 (5.9)
West	0.0 (6.2)	0.0 (8.1)	0.0 (6.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (6.9)	0.0 (5.1)	1.2 (4.2)
Northeast	0.0 (14.5)	0.0 (13.4)	0.0 (9.3)
North Central	0.0 (16.6)	0.0 (10.2)	3.9 (10.2)
South	0.0 (12.3)	0.0 (8.1)	0.0 (6.5)
West	0.0 (12.9)	0.0 (10.9)	2.8 (9.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 83
CARDIAC PACEMAKER PULSE GENERATOR REPLACEMENT
DRG(S): 118

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.8)	1.0 (3.8)	2.0 (2.3)
Northeast	0.0 (10.7)	2.6 (7.0)	1.4 (4.2)
North Central	0.0 (9.3)	0.0 (7.5)	1.8 (4.5)
South	0.0 (7.4)	0.9 (7.7)	4.2 (4.5)
West	0.0 (15.3)	0.0 (8.5)	0.0 (5.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.6)	0.0 (3.7)	0.0 (2.5)
Northeast	0.0 (9.6)	0.0 (7.9)	0.0 (4.7)
North Central	0.0 (9.1)	0.0 (6.6)	0.0 (5.0)
South	0.0 (7.8)	0.0 (6.9)	0.0 (4.1)
West	0.0 (11.8)	0.0 (8.8)	0.0 (6.9)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 84
VEIN LIGATION & STRIPPING
DRG(S): 119

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	 65-74	 75+
U.S.	1.0 (2.7)	1.2 (4.2)	6.0 (5.5)
Northeast	0.0 (5.1)	0.0 (8.8)	11.2 (9.2)
North Central	0.0 (5.5)	4.5 (8.2)	8.8 (11.4)
South	1.4 (4.6)	0.0 (8.3)	0.0 (9.2)
West	4.4 (8.1)	0.0 (8.4)	** (**)

Without CCs

Region	Age <65	 65-74	 75+
U.S.	0.0 (0.9)	0.0 (2.9)	0.0 (4.4)
Northeast	0.0 (1.8)	0.0 (5.3)	0.0 (6.2)
North Central	0.0 (1.7)	0.0 (6.3)	0.0 (9.8)
South	0.0 (1.8)	0.0 (5.8)	0.0 (10.6)
West	0.0 (2.3)	0.0 (6.2)	0.0 (11.8)

ACTUAL DEATH RATES

With CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 85
OTHER CIRCULATORY SYSTEM O.R. PROCEDURES
DRG(S): 120

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	5.2 (1.5)	17.4 (1.6)	16.1 (1.6)	U.S.	0.0 (2.1)	1.9 (3.5)	3.0 (2.8)
Northeast	9.0 (3.1)	27.4 (3.3)	22.1 (2.9)	Northeast	0.0 (5.6)	5.2 (8.8)	0.0 (6.0)
North Central	6.3 (3.0)	15.1 (3.2)	12.0 (3.3)	North Central	0.0 (4.2)	0.0 (7.5)	4.3 (5.5)
South	3.8 (2.3)	13.7 (2.7)	8.0 (2.7)	South	0.0 (3.2)	1.9 (4.6)	3.9 (4.1)
West	1.8 (3.7)	14.0 (4.0)	30.5 (4.4)	West	0.0 (5.3)	0.0 (15.8)	0.0 (12.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 86
CIRCULATORY DISORDERS W/ AMI
DRG(S): 121, 122, 123

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	9.4 (0.4)	17.7 (0.4)	26.2 (0.4)
Northeast	8.7 (0.9)	17.9 (0.9)	26.3 (0.8)
North Central	9.5 (0.9)	19.5 (0.9)	26.6 (0.8)
South	10.9 (0.8)	16.7 (0.7)	27.5 (0.7)
West	7.0 (1.1)	16.7 (1.1)	22.5 (1.0)

Region	Without CCs Age <65	 65-74	 75+
U.S.	1.1 (0.6)	4.5 (0.8)	12.3 (0.9)
Northeast	1.0 (1.1)	4.2 (1.6)	8.8 (1.9)
North Central	0.9 (1.1)	2.9 (1.7)	14.4 (1.8)
South	1.5 (0.9)	7.6 (1.5)	15.0 (1.5)
West	0.9 (1.3)	1.5 (2.0)	6.8 (2.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 87
CIRCULATORY DISORDERS EXCEPT AMI, W/ CARDIAC CATH. W/ COMPLEX DXS
DRG(S): 124

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.2 (0.7)	3.2 (0.9)	5.7 (1.3)
Northeast	2.3 (1.6)	3.2 (1.9)	4.4 (3.1)
North Central	2.0 (1.2)	2.5 (1.7)	5.6 (2.5)
South	2.2 (1.2)	4.2 (1.5)	5.8 (2.1)
West	2.5 (1.7)	2.3 (1.9)	6.7 (2.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.9)	0.3 (1.2)	0.3 (2.0)
Northeast	0.0 (1.9)	0.0 (2.7)	0.0 (5.2)
North Central	0.0 (1.4)	0.3 (2.2)	0.0 (3.6)
South	0.2 (1.6)	0.7 (2.3)	0.0 (3.4)
West	0.0 (2.1)	0.0 (2.7)	1.4 (4.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 88
CIRCULATORY DISORDERS EXCEPT AMI, W/ CARDIAC CATH. W/O COMPLEX DXS
DRG(S): 125

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.1 (0.6)	0.1 (0.9)	0.5 (1.6)	U.S.	0.0 (0.4)	0.0 (0.7)	0.1 (1.4)
Northeast	0.2 (1.4)	0.0 (1.9)	2.0 (3.8)	Northeast	0.0 (0.9)	0.0 (1.6)	0.0 (3.3)
North Central	0.1 (1.1)	0.2 (1.5)	0.6 (2.9)	North Central	0.0 (0.6)	0.1 (1.1)	0.4 (2.3)
South	0.0 (1.0)	0.2 (1.5)	0.0 (2.8)	South	0.0 (0.7)	0.0 (1.3)	0.0 (3.0)
West	0.0 (1.5)	0.0 (2.2)	0.0 (3.6)	West	0.0 (1.1)	0.0 (1.8)	0.0 (3.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 89
ACUTE & SUBACUTE ENDOCARDITIS
DRG(S): 126

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	7.5 (2.2)	7.7 (3.8)	17.5 (4.2)
Northeast	8.2 (3.8)	21.3 (8.1)	7.3 (10.4)
North Central	6.2 (5.1)	5.5 (8.1)	26.1 (9.0)
South	4.1 (4.2)	2.9 (6.5)	16.2 (6.8)
West	11.5 (4.5)	3.9 (7.7)	18.7 (8.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	4.7 (4.6)	24.2 (9.2)	14.8 (8.8)
Northeast	9.7 (8.0)	** (**)	39.3 (14.3)
North Central	0.0 (10.3)	0.0 (18.5)	** (**)
South	4.4 (8.1)	76.4 (16.3)	** (**)
West	0.0 (12.7)	0.0 (15.8)	0.0 (14.9)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 90
HEART FAILURE & SHOCK
DRG(S): 127

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	6.1 (0.4)	8.6 (0.4)	11.8 (0.3)
Northeast	5.6 (0.9)	8.5 (0.7)	12.5 (0.5)
North Central	5.8 (0.8)	8.9 (0.7)	11.5 (0.5)
South	6.6 (0.7)	8.9 (0.6)	12.1 (0.4)
West	6.1 (1.1)	7.4 (0.9)	10.5 (0.7)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	2.9 (0.9)	3.5 (0.8)	5.7 (0.6)
Northeast	0.4 (2.2)	2.3 (1.9)	4.0 (1.2)
North Central	1.8 (1.8)	4.2 (1.6)	6.2 (1.1)
South	4.4 (1.4)	4.5 (1.3)	6.9 (1.0)
West	4.1 (2.6)	1.1 (2.3)	4.7 (1.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 91
DEEP VEIN THROMBOPHLEBITIS
DRG(S): 128

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	1.2 (1.2)	2.1 (1.5)	4.1 (1.4)
Northeast	0.5 (2.5)	4.4 (3.0)	5.8 (2.6)
North Central	1.2 (2.2)	2.4 (2.8)	2.9 (2.7)
South	1.8 (2.2)	1.4 (2.6)	4.9 (2.5)
West	1.4 (3.1)	0.0 (3.5)	0.9 (3.7)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (0.9)	0.2 (1.7)	0.5 (1.8)
Northeast	0.0 (2.0)	0.7 (3.3)	2.2 (3.8)
North Central	0.0 (1.6)	0.0 (3.2)	0.0 (3.2)
South	0.0 (1.5)	0.0 (2.8)	0.0 (3.0)
West	0.0 (2.5)	0.0 (4.4)	0.0 (5.4)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 92
CARDIAC ARREST, UNEXPLAINED
DRG(S): 129

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	76.0 (2.6)	71.9 (2.8)	77.0 (2.5)	U.S.	56.8 (6.8)	83.6 (8.7)	76.4 (7.7)
Northeast	72.8 (6.5)	68.6 (6.9)	89.7 (5.5)	Northeast	** (**)	** (**)	100.0 (18.0)
North Central	80.3 (4.8)	76.0 (5.6)	69.6 (5.1)	North Central	78.9 (12.5)	85.5 (16.0)	50.0 (15.8)
South	80.5 (4.6)	62.6 (4.4)	72.5 (4.1)	South	28.5 (11.1)	100.0 (15.0)	88.6 (13.0)
West	64.5 (6.0)	87.6 (6.2)	81.0 (5.8)	West	57.0 (14.1)	61.6 (16.7)	67.1 (15.7)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+		Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 93
PERIPHERAL VASCULAR DISORDERS
DRG(S): 130, 131

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	2.4 (0.8)	5.8 (0.9)	11.4 (0.8)
Northeast	2.9 (1.6)	7.8 (2.0)	13.7 (1.7)
North Central	2.5 (1.4)	5.7 (1.7)	10.9 (1.6)
South	2.0 (1.4)	5.9 (1.6)	11.0 (1.4)
West	2.4 (2.1)	3.0 (2.5)	9.7 (2.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.5 (0.7)	1.0 (1.1)	2.3 (1.1)
Northeast	0.3 (1.5)	0.9 (2.3)	2.4 (2.4)
North Central	0.3 (1.2)	0.0 (1.9)	2.0 (2.1)
South	0.6 (1.2)	1.9 (1.8)	2.7 (1.8)
West	0.7 (1.9)	1.1 (2.9)	1.5 (3.3)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 94
ATHEROSCLEROSIS
DRG(S): 132, 133

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.4 (1.2)	4.3 (1.5)	7.9 (1.4)
Northeast	1.0 (3.1)	3.9 (4.0)	10.1 (3.3)
North Central	2.0 (2.5)	5.6 (3.5)	5.4 (3.0)
South	1.2 (1.8)	3.6 (2.1)	9.3 (2.1)
West	1.4 (3.6)	5.7 (4.0)	4.7 (3.7)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.2 (1.5)	1.1 (2.2)	2.7 (2.5)
Northeast	0.0 (3.4)	0.4 (4.2)	0.0 (5.3)
North Central	0.0 (2.9)	3.7 (4.4)	2.8 (4.6)
South	0.4 (2.4)	0.0 (3.9)	3.7 (4.0)
West	0.0 (4.4)	0.0 (6.3)	5.4 (9.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 95
HYPERTENSION
DRG(S): 134

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.3 (0.9)	1.8 (1.3)	3.2 (1.4)
Northeast	0.7 (2.4)	2.1 (3.4)	4.6 (3.2)
North Central	0.0 (1.7)	1.0 (2.9)	0.8 (3.0)
South	0.5 (1.3)	2.0 (1.8)	3.4 (2.0)
West	0.0 (2.9)	2.3 (3.6)	4.0 (3.8)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.8)	0.0 (1.4)	0.0 (1.7)
Northeast	0.0 (2.0)	0.0 (3.5)	0.0 (4.0)
North Central	0.0 (1.5)	0.0 (3.0)	0.0 (3.5)
South	0.0 (1.0)	0.0 (2.0)	0.0 (2.5)
West	0.5 (2.7)	0.0 (4.1)	0.0 (4.4)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 96
CARDIAC CONGENITAL & VALVULAR DISORDERS
DRG(S): 135, 136, 137

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	 65-74	 75+
U.S.	2.3 (1.7)	3.6 (3.0)	11.9 (2.2)
Northeast	0.0 (4.2)	4.6 (5.8)	12.4 (4.2)
North Central	2.0 (3.8)	4.1 (5.5)	10.0 (4.4)
South	3.3 (2.6)	2.5 (6.1)	11.8 (3.8)
West	2.6 (3.6)	2.9 (6.6)	14.4 (5.7)

Without CCs

Region	Age <65	 65-74	 75+
U.S.	1.2 (1.4)	0.0 (4.6)	1.2 (4.2)
Northeast	1.7 (3.6)	0.0 (8.3)	3.8 (7.5)
North Central	0.1 (3.0)	0.0 (9.8)	0.0 (8.1)
South	1.8 (2.0)	0.0 (7.3)	0.0 (8.4)
West	0.0 (4.1)	0.0 (15.3)	0.0 (10.0)

ACTUAL DEATH RATES

With CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 97
CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS
DRG(S): 138, 139

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.0 (0.6)	3.0 (0.5)	4.2 (0.5)
Northeast	2.0 (1.2)	1.9 (1.2)	4.2 (1.0)
North Central	2.0 (1.1)	3.6 (1.1)	6.1 (0.9)
South	2.0 (0.9)	2.6 (0.9)	3.3 (0.8)
West	2.0 (1.3)	4.0 (1.3)	3.3 (1.1)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.2 (0.6)	0.4 (0.7)	0.9 (0.7)
Northeast	0.1 (1.3)	0.5 (1.6)	0.0 (1.6)
North Central	0.1 (1.1)	0.0 (1.5)	0.6 (1.5)
South	0.4 (0.9)	0.7 (1.2)	1.9 (1.1)
West	0.1 (1.4)	0.0 (1.7)	0.0 (1.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 98
ANGINA PECTORIS
DRG(S): 140

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs		
	Age		
	<65	65-74	75+
U.S.	0.2 (0.5)	0.8 (0.5)	1.1 (0.4)
Northeast	0.2 (1.0)	0.7 (0.9)	0.9 (0.9)
North Central	0.3 (0.9)	1.5 (1.0)	0.9 (0.9)
South	0.1 (0.8)	0.5 (0.8)	1.7 (0.7)
West	0.3 (1.3)	0.5 (1.2)	0.3 (1.1)

Region	Without CCs		
	Age		
	<65	65-74	75+
U.S.	0.0 (0.4)	0.1 (0.5)	0.0 (0.5)
Northeast	0.1 (0.8)	0.2 (1.0)	0.1 (1.0)
North Central	0.0 (0.8)	0.1 (1.0)	0.0 (1.1)
South	0.0 (0.7)	0.0 (0.9)	0.0 (0.9)
West	0.0 (1.1)	0.0 (1.3)	0.0 (1.4)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 99
SYNCOPE & COLLAPSE
DRG(S): 141, 142

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.4 (0.9)	0.1 (0.9)	1.1 (0.7)	U.S.	0.0 (0.7)	0.0 (1.1)	0.4 (0.9)
Northeast	0.9 (1.8)	0.0 (1.9)	1.6 (1.4)	Northeast	0.0 (1.6)	0.0 (2.2)	0.1 (1.8)
North Central	0.0 (1.7)	0.2 (1.9)	1.3 (1.4)	North Central	0.0 (1.4)	0.0 (2.4)	0.2 (1.7)
South	0.5 (1.5)	0.0 (1.6)	0.5 (1.2)	South	0.0 (1.1)	0.0 (1.8)	0.9 (1.6)
West	0.4 (2.3)	0.4 (2.2)	1.0 (1.7)	West	0.0 (1.9)	0.0 (2.6)	0.0 (1.9)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 100
CHEST PAIN
DRG(S): 143

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	0.1 (0.6)	0.3 (1.0)	1.7 (1.0)
Northeast	0.0 (1.4)	0.0 (2.3)	0.8 (2.5)
North Central	0.0 (1.1)	0.3 (2.0)	2.3 (2.1)
South	0.2 (1.0)	0.5 (1.5)	1.5 (1.7)
West	0.2 (1.5)	0.0 (2.1)	2.3 (2.4)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.1 (0.4)	0.2 (0.9)	0.7 (1.2)
Northeast	0.0 (0.8)	0.1 (1.9)	0.5 (2.7)
North Central	0.1 (0.7)	0.3 (1.9)	0.0 (2.3)
South	0.1 (0.6)	0.2 (1.5)	1.7 (2.0)
West	0.0 (0.9)	0.1 (1.8)	0.0 (2.4)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 101
OTHER CIRCULATORY SYSTEM DXS
DRG(S): 144, 145

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	7.2 (0.8)	12.0 (1.0)	13.2 (1.0)
Northeast	7.0 (1.7)	13.9 (2.1)	13.4 (2.3)
North Central	8.7 (1.6)	16.7 (1.9)	10.9 (2.0)
South	5.9 (1.3)	10.0 (1.6)	17.0 (1.6)
West	8.4 (2.0)	7.0 (2.3)	8.5 (2.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.1 (1.0)	5.5 (2.1)	11.7 (2.6)
Northeast	0.6 (2.1)	8.0 (3.9)	9.7 (5.9)
North Central	1.7 (2.0)	6.7 (4.5)	6.3 (5.3)
South	1.4 (1.7)	3.9 (3.6)	7.5 (4.4)
West	0.4 (2.5)	3.1 (4.8)	25.1 (5.3)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 102
RECTAL RESECTION
DRG(S): 146, 147

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	4.0 (1.3)	6.5 (1.4)	9.9 (1.5)	**U.S.**	0.0 (1.7)	0.5 (2.4)	0.7 (2.8)
Northeast	3.8 (2.8)	6.0 (2.6)	10.5 (2.9)	**Northeast**	0.0 (3.8)	0.0 (4.6)	1.1 (5.0)
North Central	3.0 (2.7)	9.1 (2.6)	8.7 (2.8)	**North Central**	0.0 (3.4)	2.2 (4.9)	1.3 (5.5)
South	5.3 (2.4)	5.5 (2.6)	9.9 (3.0)	**South**	0.0 (2.6)	0.0 (4.7)	0.0 (5.2)
West	3.4 (2.9)	4.4 (3.4)	11.1 (3.4)	**West**	0.0 (3.8)	0.0 (5.6)	0.0 (7.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷	**No. of Patients Who died** **Total No. Patients**	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				**% Patients Who Died**			

DRG CLUSTER: 103
MAJOR SMALL & LARGE BOWEL PROCEDURES
DRG(S): 148, 149

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs				Without CCs		
	Age				Age		
Region	<65	65-74	75+	**Region**	<65	65-74	75+
U.S.	4.0 (0.5)	7.4 (0.6)	12.9 (0.6)	**U.S.**	0.3 (0.7)	0.4 (1.0)	2.7 (1.2)
Northeast	3.5 (1.1)	8.1 (1.3)	15.4 (1.1)	**Northeast**	0.5 (1.6)	0.7 (2.2)	1.7 (2.4)
North Central	3.6 (1.1)	8.1 (1.3)	11.1 (1.1)	**North Central**	0.3 (1.4)	0.7 (2.1)	2.3 (2.4)
South	5.0 (0.9)	6.5 (1.1)	12.9 (1.0)	**South**	0.4 (1.1)	0.3 (1.8)	4.3 (2.1)
West	3.3 (1.3)	6.9 (1.4)	11.3 (1.4)	**West**	0.0 (1.6)	0.0 (2.4)	1.7 (2.9)

ACTUAL DEATH RATES

	With CCs				Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷	**No. of Patients Who died** **Total No. Patients**	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				**% Patients Who Died**			

DRG CLUSTER: 104
PERITONEAL ADHESIOLYSIS
DRG(S): 150, 151

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	3.3 (1.2)	7.4 (1.6)	9.4 (1.5)	U.S.	0.0 (0.9)	0.0 (2.3)	2.6 (2.3)
Northeast	5.4 (2.8)	7.8 (3.4)	11.2 (3.4)	Northeast	0.0 (2.4)	0.0 (5.1)	1.7 (5.0)
North Central	2.2 (2.2)	5.0 (3.3)	9.2 (3.0)	North Central	0.0 (1.9)	0.0 (4.4)	2.7 (4.5)
South	4.1 (2.1)	9.2 (2.5)	7.7 (2.5)	South	0.0 (1.4)	0.0 (4.0)	4.4 (3.9)
West	1.7 (2.7)	5.8 (3.7)	11.1 (3.5)	West	0.0 (2.3)	0.0 (5.3)	0.0 (5.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 105
MINOR SMALL & LARGE BOWEL PROCEDURES
DRG(S): 152, 153

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	2.2 (1.9)	4.2 (2.6)	4.5 (2.2)	U.S.	0.0 (1.5)	1.0 (2.5)	0.0 (3.3)
Northeast	1.9 (3.7)	2.7 (5.7)	7.7 (5.0)	Northeast	0.0 (3.1)	0.0 (5.9)	0.0 (6.6)
North Central	1.5 (4.3)	4.7 (4.6)	2.2 (4.0)	North Central	0.0 (3.1)	0.0 (5.6)	0.0 (8.8)
South	1.8 (3.1)	1.5 (4.7)	4.1 (3.8)	South	0.0 (2.4)	2.2 (3.7)	0.0 (5.2)
West	4.2 (4.2)	10.2 (6.4)	6.1 (5.8)	West	0.0 (3.4)	0.0 (6.5)	0.0 (7.6)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+		Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷	No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 106
STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES
DRG(S): 154, 155, 156

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	4.9 (0.7)	9.0 (1.0)	16.3 (0.9)	U.S.	0.0 (0.8)	1.4 (1.9)	3.7 (1.8)
Northeast	5.8 (1.6)	7.4 (2.0)	16.8 (1.8)	Northeast	0.3 (2.1)	2.3 (4.1)	2.0 (3.9)
North Central	4.7 (1.5)	12.2 (1.9)	16.0 (1.8)	North Central	0.0 (1.7)	0.0 (4.1)	5.4 (3.9)
South	5.2 (1.2)	9.0 (1.7)	16.5 (1.6)	South	0.0 (1.2)	0.6 (3.1)	4.1 (3.0)
West	3.6 (1.7)	7.0 (2.2)	15.6 (2.2)	West	0.0 (2.0)	3.3 (3.9)	2.8 (4.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 107
ANAL & STOMACH PROCEDURES
DRG(S): 157, 158

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.2 (0.9)	0.6 (1.3)	2.2 (1.3)
Northeast	0.2 (1.9)	0.4 (2.7)	1.9 (2.4)
North Central	0.3 (2.0)	1.2 (2.6)	4.8 (2.7)
South	0.1 (1.5)	0.6 (2.2)	1.6 (2.2)
West	0.0 (2.3)	0.0 (3.7)	0.0 (3.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.4)	0.0 (1.1)	0.0 (1.5)
Northeast	0.0 (0.9)	0.0 (2.3)	0.0 (2.8)
North Central	0.1 (0.9)	0.0 (2.4)	0.0 (3.2)
South	0.0 (0.6)	0.0 (1.7)	0.0 (2.5)
West	0.0 (1.1)	0.0 (3.0)	0.0 (3.9)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 108
HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL, AGES 18+
DRG(S): 159, 160

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.5 (1.3)	1.7 (1.7)	1.5 (1.9)
Northeast	0.9 (2.6)	0.9 (3.7)	0.9 (3.7)
North Central	0.9 (2.6)	1.6 (3.5)	4.1 (3.5)
South	0.3 (2.1)	2.4 (2.8)	0.0 (3.6)
West	0.0 (3.0)	1.3 (4.3)	0.0 (5.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.7)	0.0 (1.3)	0.2 (1.8)
Northeast	0.0 (1.4)	0.0 (3.0)	0.0 (4.0)
North Central	0.0 (1.3)	0.0 (2.7)	0.9 (3.6)
South	0.0 (1.1)	0.0 (2.1)	0.0 (3.0)
West	0.0 (1.7)	0.0 (3.4)	0.0 (4.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 109
INGUINAL & FEMORAL HERNIA PROCEDURES, AGES 18+
DRG(S): 161, 162

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.1 (1.1)	0.6 (1.1)	1.5 (1.1)
Northeast	0.2 (1.9)	0.8 (2.0)	2.4 (2.0)
North Central	0.0 (2.2)	0.4 (2.2)	2.1 (2.3)
South	0.1 (1.9)	0.9 (1.7)	0.7 (1.8)
West	0.0 (3.5)	0.0 (3.4)	0.2 (2.9)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (0.4)	0.0 (0.8)	0.0 (0.9)
Northeast	0.0 (0.8)	0.0 (1.4)	0.0 (1.6)
North Central	0.0 (0.7)	0.0 (1.5)	0.0 (1.7)
South	0.0 (0.7)	0.1 (1.3)	0.0 (1.6)
West	0.0 (1.3)	0.0 (2.3)	0.0 (2.6)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 110
HERNIA PROCEDURES, AGES 0-17
DRG(S): 163

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	 65-74	 75+
U.S.	0.0 (3.4)	-- (--)	-- (--)
Northeast	0.0 (8.2)	-- (--)	-- (--)
North Central	0.0 (8.7)	-- (--)	-- (--)
South	0.0 (4.7)	-- (--)	-- (--)
West	0.0 (8.9)	-- (--)	-- (--)

Without CCs

Region	Age <65	 65-74	 75+
U.S.	0.0 (1.0)	-- (--)	-- (--)
Northeast	0.0 (1.9)	-- (--)	-- (--)
North Central	0.0 (2.5)	-- (--)	-- (--)
South	0.0 (1.4)	-- (--)	-- (--)
West	0.0 (3.1)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 111
APPENDECTOMY W/ COMPLICATED PRIN. DX
DRG(S): 164, 165

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.4 (1.2)	6.2 (2.9)	0.6 (3.5)
Northeast	0.0 (2.3)	14.9 (6.0)	2.7 (6.3)
North Central	0.4 (2.4)	4.9 (5.8)	0.0 (6.9)
South	1.0 (2.3)	2.3 (5.2)	0.0 (6.2)
West	0.0 (2.6)	3.2 (6.8)	0.0 (9.5)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (0.8)	0.0 (3.3)	0.0 (4.7)
Northeast	0.0 (1.8)	0.0 (8.1)	0.0 (10.1)
North Central	0.0 (1.5)	0.0 (6.3)	0.0 (10.3)
South	0.0 (1.5)	0.0 (5.7)	0.0 (7.5)
West	0.0 (1.5)	0.0 (7.0)	0.0 (10.4)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 112
APPENDECTOMY W/O COMPLICATED PRIN. DX
DRG(S): 166, 167

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.2)	3.9 (4.0)	1.9 (5.3)
Northeast	0.0 (2.6)	0.0 (9.9)	0.0 (10.8)
North Central	0.0 (2.4)	4.9 (8.5)	8.2 (11.0)
South	0.0 (2.2)	0.0 (6.7)	0.0 (9.8)
West	0.0 (2.6)	11.0 (7.8)	0.0 (10.7)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.4)	0.0 (3.0)	0.0 (4.1)
Northeast	0.0 (0.8)	0.0 (8.2)	0.0 (8.1)
North Central	0.0 (0.7)	0.0 (6.3)	0.0 (8.8)
South	0.0 (0.6)	0.0 (4.9)	0.0 (7.3)
West	0.0 (0.7)	0.0 (5.8)	0.0 (8.9)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 113
MOUTH PROCEDURES
DRG(S): 168, 169

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (1.1)	2.4 (2.8)	2.7 (3.5)
Northeast	0.0 (2.7)	1.9 (5.4)	13.8 (7.8)
North Central	0.0 (2.1)	0.0 (5.9)	0.0 (5.7)
South	0.0 (1.9)	0.0 (4.7)	0.0 (6.5)
West	0.0 (2.8)	11.1 (6.8)	0.0 (9.1)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.6)	0.0 (2.7)	0.0 (3.3)
Northeast	0.0 (1.6)	0.0 (6.8)	0.0 (9.1)
North Central	0.0 (1.2)	0.0 (5.4)	0.0 (7.0)
South	0.0 (0.9)	0.0 (4.0)	0.0 (4.6)
West	0.0 (1.4)	0.0 (7.3)	0.0 (9.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 114
OTHER DIGESTIVE SYSTEM O.R. PROCEDURES
DRG(S): 170, 171

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	12.3 (1.4)	18.4 (2.0)	30.0 (1.8)
Northeast	14.9 (3.0)	32.2 (3.9)	32.1 (3.8)
North Central	12.3 (2.7)	15.3 (4.0)	30.0 (3.7)
South	12.8 (2.4)	10.7 (3.6)	28.0 (3.4)
West	8.9 (3.1)	16.1 (4.6)	30.2 (3.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.8 (1.1)	8.3 (3.3)	20.5 (4.5)
Northeast	0.0 (2.7)	7.3 (7.0)	23.2 (9.5)
North Central	0.7 (2.3)	0.0 (6.2)	26.3 (8.0)
South	1.0 (1.8)	16.5 (6.1)	18.7 (8.3)
West	1.0 (2.7)	9.0 (6.8)	10.0 (10.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 115
DIGESTIVE MALIGNANCY
DRG(S): 172, 173

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	34.3 (1.1)	30.6 (1.2)	28.1 (1.0)
Northeast	31.6 (2.4)	30.7 (2.2)	31.3 (2.0)
North Central	30.8 (2.1)	34.6 (2.4)	31.8 (2.1)
South	38.5 (1.7)	30.9 (2.2)	24.9 (1.7)
West	33.4 (2.8)	23.0 (3.1)	24.2 (2.8)

Region	Without CCs Age <65	 65-74	 75+
U.S.	8.7 (2.1)	11.0 (2.7)	14.0 (2.2)
Northeast	6.9 (4.6)	9.8 (6.0)	11.7 (4.7)
North Central	5.6 (3.9)	13.5 (5.8)	6.1 (4.8)
South	11.5 (3.3)	12.6 (3.8)	20.7 (3.4)
West	10.3 (6.4)	0.0 (8.4)	9.6 (5.9)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 116
G.I. HEMORRHAGE
DRG(S): 174, 175

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.8 (0.5)	4.9 (0.7)	7.7 (0.5)
Northeast	4.0 (1.1)	5.0 (1.4)	8.4 (1.0)
North Central	2.4 (1.1)	5.5 (1.4)	8.1 (1.0)
South	2.8 (0.9)	4.3 (1.1)	7.4 (0.9)
West	2.1 (1.2)	5.1 (1.5)	6.9 (1.2)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.5 (0.7)	0.6 (1.1)	1.6 (0.9)
Northeast	0.0 (1.5)	0.0 (2.1)	0.8 (1.9)
North Central	0.3 (1.4)	0.6 (2.3)	1.8 (1.8)
South	0.6 (1.1)	1.5 (1.9)	2.5 (1.7)
West	1.0 (1.5)	0.0 (2.5)	0.9 (2.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 117
COMPLICATED PEPTIC ULCER
DRG(S): 176

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.4 (2.0)	2.4 (2.4)	7.8 (2.0)
Northeast	1.4 (4.6)	2.0 (5.5)	9.7 (4.1)
North Central	0.0 (3.8)	4.1 (4.4)	5.7 (3.7)
South	4.8 (3.2)	2.2 (3.9)	6.4 (3.7)
West	1.5 (4.8)	0.0 (6.0)	11.0 (4.7)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.0)	1.1 (4.0)	0.8 (3.5)
Northeast	0.0 (4.8)	4.4 (8.1)	0.0 (6.7)
North Central	0.0 (4.1)	0.0 (7.4)	0.0 (7.2)
South	0.0 (3.0)	0.0 (6.4)	0.0 (6.2)
West	0.0 (5.4)	0.0 (13.7)	4.1 (7.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 118
UNCOMPLICATED PEPTIC ULCER
DRG(S): 177, 178

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.2 (1.1)	1.0 (1.7)	2.1 (1.5)	0.0 (0.8)	0.0 (2.0)	0.0 (2.1)
Northeast	0.8 (2.8)	2.4 (3.9)	2.0 (3.2)	0.0 (2.2)	0.0 (4.7)	0.0 (5.2)
North Central	0.3 (2.2)	1.3 (3.5)	1.5 (3.0)	0.0 (1.7)	0.0 (4.4)	0.0 (4.6)
South	0.0 (1.6)	0.5 (2.6)	3.5 (2.3)	0.0 (1.1)	0.0 (2.8)	0.0 (3.2)
West	0.0 (2.9)	0.0 (4.6)	0.0 (3.5)	0.0 (2.4)	0.0 (5.8)	0.0 (5.5)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷	÷	÷	÷
	=	=	=	=	=	=
% Patients Who Died						

DRG CLUSTER: 119
INFLAMMATORY BOWEL DISEASE
DRG(S): 179

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.7 (1.2)	3.2 (3.0)	6.0 (2.9)
Northeast	0.4 (2.5)	1.6 (5.5)	10.0 (6.0)
North Central	1.9 (2.4)	8.0 (5.8)	8.6 (5.4)
South	0.0 (2.2)	2.4 (6.0)	2.7 (5.4)
West	0.6 (3.0)	0.0 (7.0)	2.7 (6.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.1)	0.0 (4.1)	0.0 (5.2)
Northeast	0.0 (2.3)	0.0 (6.9)	0.0 (9.9)
North Central	0.0 (2.2)	0.0 (10.5)	0.0 (8.0)
South	0.0 (1.8)	0.0 (6.9)	0.0 (11.4)
West	0.0 (2.9)	0.0 (11.6)	0.0 (18.4)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 120
G.I. OBSTRUCTION
DRG(S): 180, 181

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	3.5 (1.0)	5.1 (1.0)	9.1 (0.8)
Northeast	5.0 (2.1)	5.1 (2.3)	9.4 (1.5)
North Central	3.3 (1.8)	5.1 (2.1)	8.9 (1.5)
South	3.5 (1.7)	5.4 (1.8)	11.2 (1.4)
West	2.4 (2.2)	4.7 (2.3)	4.9 (1.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.2 (0.8)	0.1 (1.3)	1.3 (1.1)
Northeast	0.6 (1.6)	0.0 (2.9)	1.5 (2.4)
North Central	0.1 (1.5)	0.5 (2.8)	0.7 (2.4)
South	0.0 (1.3)	0.0 (2.2)	0.3 (2.0)
West	0.0 (1.8)	0.0 (2.8)	3.5 (2.5)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 121
ESOPHAGITIS, GASTROENT. & MISC. DIGESTIVE DISORDERS
DRG(S): 182, 183, 184

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.3 (0.3)	1.6 (0.5)	3.0 (0.4)
Northeast	0.7 (0.7)	1.7 (1.1)	4.0 (0.9)
North Central	0.4 (0.5)	1.1 (0.9)	3.3 (0.8)
South	0.2 (0.4)	1.9 (0.7)	2.8 (0.6)
West	0.3 (0.7)	1.5 (1.1)	1.6 (1.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.2)	0.1 (0.6)	0.2 (0.6)
Northeast	0.0 (0.5)	0.0 (1.4)	0.3 (1.5)
North Central	0.1 (0.4)	0.0 (1.3)	0.1 (1.3)
South	0.0 (0.3)	0.1 (0.9)	0.3 (1.0)
West	0.0 (0.6)	0.0 (1.5)	0.0 (1.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 122
DENTAL & ORAL DISORDERS EXCEPT EXTRACTIONS & RESTORATIONS
DRG(S): 185, 186

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.3 (1.3)	14.3 (3.3)	6.7 (3.5)	U.S.	0.7 (1.1)	0.0 (6.0)	1.8 (5.1)
Northeast	1.5 (2.8)	29.1 (8.1)	10.2 (7.9)	Northeast	0.0 (2.4)	** (**)	0.0 (19.0)
North Central	3.0 (2.4)	21.0 (5.9)	3.3 (7.0)	North Central	0.3 (2.2)	0.0 (9.6)	0.0 (10.4)
South	0.3 (2.2)	8.0 (5.3)	5.2 (5.9)	South	1.5 (2.0)	0.0 (9.8)	3.1 (6.8)
West	0.0 (3.3)	0.0 (8.4)	10.3 (8.1)	West	0.5 (2.8)	0.0 (14.4)	0.0 (15.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 123
DENTAL EXTRACTIONS & RESTORATIONS
DRG(S): 187

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (2.2)	0.0 (7.0)	0.0 (8.0)
Northeast	0.0 (3.5)	0.0 (15.3)	0.0 (13.5)
North Central	0.0 (4.6)	0.0 (14.8)	0.0 (12.6)
South	0.0 (4.2)	0.0 (11.1)	** (**)
West	0.0 (7.8)	0.0 (17.6)	0.0 (19.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.9)	0.0 (7.8)	0.0 (6.9)
Northeast	0.0 (3.2)	0.0 (12.9)	0.0 (13.7)
North Central	0.0 (4.4)	0.0 (19.1)	0.0 (15.5)
South	0.0 (3.2)	0.0 (13.0)	0.0 (12.3)
West	0.0 (6.0)	** (**)	0.0 (14.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 124
OTHER DIGESTIVE SYSTEM DXS
DRG(S): 188, 189, 190

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	3.3 (0.9)	6.1 (1.3)	13.1 (1.1)
Northeast	3.7 (2.0)	9.5 (2.8)	12.1 (2.1)
North Central	2.7 (1.9)	6.2 (2.6)	18.2 (2.3)
South	2.7 (1.4)	3.4 (2.2)	11.7 (1.8)
West	5.2 (2.3)	7.5 (3.4)	10.7 (2.7)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.7)	0.5 (1.8)	3.9 (1.7)
Northeast	0.0 (1.4)	0.0 (3.4)	4.7 (3.4)
North Central	0.0 (1.4)	0.0 (3.9)	5.4 (3.7)
South	0.0 (1.1)	0.0 (3.1)	1.9 (2.8)
West	0.2 (1.7)	3.2 (4.9)	6.3 (4.9)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 125
MAJOR PANCREAS, LIVER & SHUNT PROCEDURES
DRG(S): 191

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	15.0 (1.5)	13.9 (2.3)	22.4 (3.3)	U.S.	1.4 (2.6)	4.8 (5.6)	5.3 (8.9)
Northeast	18.3 (3.1)	21.3 (5.4)	21.7 (6.5)	Northeast	0.0 (7.0)	0.0 (12.5)	** (**)
North Central	13.1 (2.9)	13.4 (4.6)	18.6 (7.0)	North Central	0.0 (5.8)	12.5 (9.2)	0.0 (19.1)
South	13.9 (2.6)	11.8 (3.6)	25.2 (5.0)	South	3.2 (3.9)	0.0 (9.8)	14.4 (14.6)
West	15.5 (3.2)	11.8 (5.3)	24.5 (9.7)	West	0.0 (5.8)	0.0 (16.8)	0.0 (19.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 126
MINOR PANCREAS, LIVER & SHUNT PROCEDURES
DRG(S): 192

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	9.5 (2.7)	20.9 (4.3)	21.8 (4.2)	U.S.	0.0 (4.0)	0.0 (9.4)	0.0 (10.2)
Northeast	8.5 (5.3)	28.6 (7.5)	18.4 (7.6)	Northeast	0.0 (10.2)	-- (--)	** (**)
North Central	8.0 (5.5)	22.1 (9.3)	36.5 (9.1)	North Central	0.0 (7.4)	0.0 (16.2)	** (**)
South	12.9 (4.7)	18.1 (6.9)	18.4 (8.3)	South	0.0 (7.6)	0.0 (11.6)	0.0 (11.4)
West	6.3 (6.8)	0.0 (15.1)	15.1 (9.0)	West	0.0 (7.5)	-- (--)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 127
BILIARY TRACT PROCEDURES EXCEPT TOTAL CHOLECYSTECTOMY
DRG(S): 193, 194

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	6.3 (1.5)	11.1 (1.7)	15.5 (1.5)	U.S.	0.7 (1.7)	0.5 (2.7)	2.8 (2.8)
Northeast	6.0 (2.9)	13.3 (3.2)	14.9 (2.6)	Northeast	1.1 (4.0)	0.6 (5.6)	2.3 (5.8)
North Central	9.3 (3.4)	10.5 (3.5)	14.0 (3.1)	North Central	0.0 (4.0)	1.7 (6.0)	3.4 (5.1)
South	5.0 (2.5)	10.0 (3.1)	18.1 (2.7)	South	0.0 (2.7)	0.0 (4.4)	3.9 (4.9)
West	5.9 (3.5)	10.5 (3.9)	14.2 (3.5)	West	2.2 (3.4)	0.0 (5.9)	0.0 (7.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 128
TOTAL CHOLECYSTECTOMY W/ C.D.E.
DRG(S): 195, 196

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	0.6 (0.9)	1.9 (1.2)	6.4 (1.2)
Northeast	0.0 (2.1)	2.9 (2.7)	9.6 (2.6)
North Central	0.5 (1.9)	1.5 (2.6)	4.5 (2.2)
South	0.7 (1.5)	2.1 (2.0)	6.3 (2.0)
West	1.1 (2.1)	0.6 (3.0)	5.8 (2.8)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (1.4)	0.0 (2.8)	0.6 (3.0)
Northeast	0.0 (3.4)	0.0 (6.8)	0.0 (9.3)
North Central	0.0 (2.7)	0.0 (6.3)	2.5 (6.1)
South	0.0 (2.1)	0.0 (4.2)	0.0 (4.2)
West	0.0 (3.2)	0.0 (6.4)	0.0 (7.3)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 129
TOTAL CHOLECYSTECTOMY W/O C.D.E.
DRG(S): 197, 198

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.4 (0.4)	2.5 (0.7)	5.6 (0.9)
Northeast	0.2 (1.0)	1.7 (1.6)	3.4 (2.1)
North Central	0.3 (0.8)	2.5 (1.4)	5.7 (1.7)
South	0.7 (0.7)	3.5 (1.2)	7.5 (1.5)
West	0.3 (1.0)	1.3 (1.8)	3.6 (2.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.3)	0.0 (0.9)	0.5 (1.3)
Northeast	0.0 (0.8)	0.0 (1.9)	0.0 (3.1)
North Central	0.0 (0.6)	0.0 (1.7)	0.0 (2.5)
South	0.0 (0.5)	0.0 (1.5)	1.3 (2.1)
West	0.0 (0.8)	0.0 (2.0)	0.0 (3.0)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 130
HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY
DRG(S): 199

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	11.4 (3.1)	19.5 (3.2)	33.0 (3.5)	U.S.	0.0 (5.1)	22.2 (8.5)	10.8 (9.0)
Northeast	19.2 (7.7)	30.5 (7.9)	39.8 (7.5)	Northeast	0.0 (13.6)	0.0 (18.1)	** (**)
North Central	2.3 (5.9)	21.4 (6.0)	36.3 (6.3)	North Central	0.0 (11.9)	23.7 (18.8)	20.0 (17.3)
South	11.3 (5.4)	11.9 (5.3)	29.6 (6.0)	South	0.0 (6.4)	30.2 (11.2)	0.0 (12.5)
West	17.2 (6.7)	21.5 (7.2)	22.9 (9.1)	West	** (**)	-- (--)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 131
HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY
DRG(S): 200

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	12.4 (2.6)	21.0 (4.5)	24.4 (6.2)	U.S.	0.0 (3.1)	0.0 (8.0)	** (**)
Northeast	17.3 (5.3)	8.0 (9.5)	13.6 (14.3)	Northeast	0.0 (7.8)	0.0 (16.9)	-- (--)
North Central	8.7 (5.5)	5.1 (8.7)	18.7 (11.8)	North Central	0.0 (7.6)	0.0 (16.7)	** (**)
South	15.3 (4.4)	39.1 (6.9)	36.4 (9.1)	South	0.0 (4.1)	0.0 (11.3)	-- (--)
West	5.8 (5.7)	15.2 (15.0)	** (**)	West	0.0 (9.3)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 132
OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES
DRG(S): 201

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	16.5 (2.0)	15.4 (3.0)	26.8 (4.3)	U.S.	4.4 (5.9)	0.0 (13.1)	** (**)
Northeast	16.6 (3.5)	23.6 (5.0)	31.2 (8.0)	Northeast	15.3 (11.1)	0.0 (16.2)	-- (--)
North Central	10.4 (4.3)	12.7 (6.1)	37.2 (10.5)	North Central	0.0 (12.4)	** (**)	** (**)
South	25.2 (3.8)	1.4 (11.0)	22.9 (6.8)	South	0.0 (9.0)	-- (--)	-- (--)
West	10.8 (4.5)	11.7 (5.1)	16.8 (11.2)	West	** (**)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 133
CIRRHOSIS & ALCOHOLIC HEPATITIS
DRG(S): 202

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	15.0 (0.9)	17.0 (1.6)	21.7 (2.3)
Northeast	15.4 (1.8)	19.5 (3.3)	26.9 (4.6)
North Central	13.0 (1.8)	17.5 (3.5)	21.6 (5.1)
South	14.0 (1.6)	13.5 (2.7)	13.9 (3.8)
West	18.9 (2.1)	19.7 (3.5)	30.8 (5.7)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	3.0 (2.4)	4.1 (5.6)	0.0 (14.0)
Northeast	4.8 (5.6)	0.0 (10.3)	** (**)
North Central	3.3 (5.0)	16.5 (11.1)	** (**)
South	2.0 (3.5)	0.0 (8.8)	** (**)
West	3.8 (7.5)	** (**)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 134
MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS
DRG(S): 203

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	37.6 (1.2)	41.0 (1.3)	41.7 (1.2)
Northeast	39.4 (2.6)	46.7 (2.6)	43.7 (2.4)
North Central	35.5 (2.3)	33.4 (2.5)	42.4 (2.6)
South	37.2 (2.1)	42.8 (2.2)	39.7 (2.1)
West	39.4 (2.7)	41.0 (3.0)	41.9 (3.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	22.0 (2.1)	36.7 (2.6)	19.9 (2.6)
Northeast	25.5 (5.0)	24.7 (4.9)	20.5 (5.5)
North Central	32.6 (4.5)	42.4 (5.5)	10.6 (5.0)
South	18.5 (3.2)	46.7 (4.5)	31.5 (5.1)
West	12.5 (5.6)	26.9 (7.0)	17.3 (5.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 135
DISORDERS OF PANCREAS EXCEPT MALIGNANCY
DRG(S): 204

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	1.2 (0.7)	2.3 (1.5)	6.7 (1.4)
Northeast	1.5 (1.4)	2.0 (3.5)	9.4 (3.2)
North Central	0.7 (1.2)	4.9 (3.1)	8.2 (2.8)
South	1.4 (1.1)	1.0 (2.2)	4.8 (2.2)
West	1.2 (1.7)	2.2 (4.0)	5.7 (3.4)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (0.7)	0.0 (1.9)	2.8 (2.0)
Northeast	0.0 (1.7)	0.0 (4.6)	0.0 (4.7)
North Central	0.0 (1.5)	0.0 (3.8)	1.2 (4.2)
South	0.0 (1.2)	0.0 (3.0)	5.4 (2.9)
West	0.0 (1.9)	0.0 (4.9)	0.0 (5.6)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 136
DISORDERS OF LIVER EXCEPT MALIGNANCY, CIRRHOSIS, ALCOHOLIC HEPATITIS
DRG(S): 205, 206

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	14.1 (0.9)	22.1 (1.5)	26.2 (1.8)
Northeast	18.6 (1.9)	23.9 (2.9)	27.8 (3.6)
North Central	13.3 (1.9)	29.5 (3.2)	38.7 (4.0)
South	12.6 (1.5)	18.2 (2.5)	23.6 (3.0)
West	12.3 (2.1)	18.3 (3.3)	12.1 (4.7)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.6 (0.9)	4.6 (2.7)	7.5 (3.9)
Northeast	0.0 (2.3)	2.3 (5.9)	13.7 (9.6)
North Central	0.4 (1.9)	16.3 (5.5)	11.4 (8.3)
South	1.1 (1.4)	0.0 (4.2)	6.8 (6.3)
West	0.2 (2.6)	0.0 (8.4)	0.0 (8.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 137
DISORDERS OF BILIARY TRACT
DRG(S): 207, 208

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.1 (1.1)	3.4 (1.3)	4.0 (1.0)	U.S.	0.0 (0.7)	0.3 (1.6)	0.3 (1.5)
Northeast	0.9 (2.4)	5.3 (2.9)	5.5 (2.3)	Northeast	0.0 (1.6)	0.0 (3.9)	1.2 (3.2)
North Central	1.2 (2.1)	5.8 (2.7)	4.5 (1.9)	North Central	0.0 (1.5)	0.0 (3.4)	0.0 (3.1)
South	1.4 (1.8)	1.5 (2.2)	2.5 (1.7)	South	0.0 (1.2)	0.7 (2.4)	0.0 (2.4)
West	0.2 (2.9)	1.6 (3.4)	4.8 (2.9)	West	0.0 (2.0)	0.0 (3.9)	0.0 (4.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 138
MAJOR JOINT AND LIMB ATTACHMENT PROCEDURES
DRG(S): 209

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.7 (1.0)	1.7 (0.7)	5.1 (0.6)	U.S.	0.3 (0.7)	0.1 (0.6)	0.5 (0.6)
Northeast	0.7 (2.2)	3.8 (1.7)	5.0 (1.3)	Northeast	0.0 (1.8)	0.0 (1.6)	0.3 (1.5)
North Central	1.5 (1.7)	1.6 (1.3)	3.8 (1.1)	North Central	0.1 (1.2)	0.2 (1.1)	0.6 (1.2)
South	3.0 (1.9)	1.5 (1.4)	6.9 (1.0)	South	0.8 (1.3)	0.0 (1.1)	0.7 (1.1)
West	1.2 (2.2)	0.3 (1.6)	4.3 (1.3)	West	0.0 (1.6)	0.0 (1.4)	0.1 (1.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 139
HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT
DRG(S): 210, 211, 212

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	2.5 (0.9)	4.3 (1.1)	7.4 (0.5)	U.S.	0.0 (0.8)	0.2 (1.2)	0.8 (0.7)
Northeast	2.8 (2.1)	6.8 (2.1)	8.8 (1.1)	Northeast	0.0 (1.9)	0.0 (2.6)	1.2 (1.5)
North Central	2.2 (2.0)	3.7 (2.2)	5.9 (1.1)	North Central	0.0 (1.6)	0.4 (2.6)	0.7 (1.4)
South	2.6 (1.5)	3.5 (1.8)	8.1 (0.9)	South	0.0 (1.2)	0.3 (2.1)	0.7 (1.2)
West	1.7 (2.2)	3.2 (2.5)	6.3 (1.3)	West	0.0 (1.7)	0.0 (3.0)	0.8 (1.8)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+		Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷	No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 140
AMPUTATIONS FOR MUSCULOSKELETAL SYSTEM & CONN. TISSUE DISORDERS
DRG(S): 213

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	6.0 (3.0)	1.6 (3.5)	2.1 (3.3)
Northeast	3.3 (6.3)	0.0 (9.6)	0.0 (9.3)
North Central	7.7 (5.8)	3.6 (7.3)	2.8 (6.5)
South	9.8 (5.4)	0.3 (5.1)	0.0 (5.3)
West	0.0 (7.2)	3.7 (8.1)	5.8 (6.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (3.3)	0.0 (5.9)	0.0 (6.5)
Northeast	0.0 (8.6)	0.0 (16.0)	0.0 (16.6)
North Central	0.0 (7.0)	0.0 (13.7)	0.0 (12.1)
South	0.0 (4.5)	0.0 (8.0)	0.0 (10.4)
West	0.0 (9.6)	0.0 (15.8)	0.0 (15.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 141
BACK & NECK PROCEDURES
DRG(S): 214, 215

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.1 (0.7)	2.3 (1.3)	3.0 (1.7)
Northeast	0.3 (2.0)	0.9 (3.2)	3.5 (4.0)
North Central	1.0 (1.6)	2.3 (2.5)	5.7 (3.2)
South	1.5 (1.1)	3.0 (2.3)	2.8 (3.2)
West	1.0 (1.5)	2.2 (2.5)	0.1 (3.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.3)	0.1 (1.0)	0.2 (1.6)
Northeast	0.0 (0.8)	0.3 (2.6)	0.0 (4.3)
North Central	0.0 (0.6)	0.1 (1.9)	0.7 (3.1)
South	0.0 (0.5)	0.0 (1.7)	0.0 (2.9)
West	0.0 (0.7)	0.0 (1.9)	0.0 (3.1)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 142
BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE
DRG(S): 216

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	4.9 (3.1)	4.1 (3.9)	5.9 (4.0)
Northeast	3.5 (6.5)	0.0 (6.8)	0.0 (8.4)
North Central	0.0 (5.9)	11.7 (9.4)	10.8 (9.6)
South	9.4 (5.1)	3.0 (6.6)	14.5 (7.7)
West	5.1 (8.7)	7.1 (10.1)	0.0 (7.2)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.0)	0.0 (4.3)	0.0 (4.8)
Northeast	0.0 (4.7)	0.0 (11.3)	0.0 (10.0)
North Central	0.0 (4.2)	0.0 (8.2)	0.0 (8.3)
South	0.0 (3.0)	0.0 (6.9)	0.0 (8.5)
West	0.0 (4.7)	0.0 (9.2)	0.0 (14.9)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 143
WOUND DEBRID. & SKIN GRAFT EXCEPT HND, FOR MUSCULO. & CONN. TISS. DIS.
DRG(S): 217

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.1 (1.2)	4.8 (2.4)	13.3 (2.5)
Northeast	2.0 (2.5)	0.0 (4.9)	20.5 (4.6)
North Central	1.1 (2.3)	5.3 (4.9)	11.9 (5.5)
South	0.5 (2.0)	9.0 (4.1)	11.3 (3.9)
West	1.1 (2.8)	2.3 (5.8)	4.6 (7.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.8)	0.0 (3.0)	0.0 (4.4)
Northeast	0.0 (1.9)	0.0 (6.7)	0.0 (9.8)
North Central	0.2 (1.5)	0.0 (5.8)	0.0 (7.4)
South	0.0 (1.3)	0.0 (5.0)	0.0 (9.3)
West	0.0 (2.0)	0.0 (7.2)	0.0 (9.2)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 144
LOWER EXTREM. & HUMER PROCEDURES EXCEPT HIP, FOOT, FEMUR
DRG(S): 218, 219, 220

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.6 (1.1)	2.8 (1.9)	3.4 (2.0)
Northeast	0.0 (2.3)	0.0 (3.8)	4.8 (4.1)
North Central	0.0 (2.1)	3.3 (4.1)	2.4 (4.2)
South	1.1 (2.0)	3.7 (3.3)	4.2 (3.4)
West	1.4 (2.4)	3.2 (4.2)	1.4 (4.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.4)	0.0 (1.4)	0.0 (1.8)
Northeast	0.0 (1.0)	0.0 (3.0)	0.0 (3.8)
North Central	0.0 (0.8)	0.0 (2.7)	0.0 (3.3)
South	0.0 (0.8)	0.0 (2.6)	0.0 (3.0)
West	0.0 (0.9)	0.0 (2.9)	0.0 (4.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 145
KNEE PROCEDURES
DRG(S): 221, 222

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.5 (2.0)	0.0 (3.7)	2.6 (4.4)
Northeast	0.0 (4.3)	0.0 (7.1)	0.0 (8.4)
North Central	1.4 (4.2)	0.0 (6.5)	0.0 (8.4)
South	0.0 (3.7)	0.0 (7.3)	0.0 (8.9)
West	0.5 (4.1)	0.0 (9.7)	13.1 (9.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.5)	0.0 (2.1)	0.0 (3.0)
Northeast	0.0 (1.1)	0.0 (4.6)	0.0 (6.1)
North Central	0.0 (1.1)	0.0 (4.0)	0.0 (6.1)
South	0.0 (1.0)	0.0 (3.6)	0.0 (5.1)
West	0.0 (1.0)	0.0 (4.7)	0.0 (7.7)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 146
MAJOR SHOULDER/ELBOW PROCEDURES OR OTHER UPPER EXTREM. PROCS. W/ CCS
DRG(S): 223

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.7 (1.6)	0.8 (2.4)	1.5 (2.5)
Northeast	0.0 (3.5)	1.8 (5.2)	3.1 (5.5)
North Central	0.0 (2.9)	1.5 (4.7)	1.7 (5.1)
South	2.4 (2.9)	0.0 (4.3)	0.0 (4.7)
West	0.0 (3.2)	0.0 (5.3)	1.8 (5.2)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (0.8)	0.0 (2.2)	0.0 (3.0)
Northeast	0.0 (2.0)	0.0 (6.0)	0.0 (7.7)
North Central	0.0 (1.6)	0.0 (4.2)	0.0 (6.5)
South	0.0 (1.6)	0.0 (4.4)	0.0 (5.0)
West	0.0 (1.7)	0.0 (4.0)	0.0 (5.9)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 147
SHOULDER, ELBOW, OR FOREARM EXCEPT MAJOR JOINT PROCEDURES W/O CCS
DRG(S): 224

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	-- (--)	-- (--)	-- (--)	U.S.	0.0 (0.6)	0.0 (1.7)	0.0 (2.3)
Northeast	-- (--)	-- (--)	-- (--)	Northeast	0.0 (1.3)	0.0 (3.3)	0.0 (4.8)
North Central	-- (--)	-- (--)	-- (--)	North Central	0.0 (1.1)	0.0 (3.6)	0.0 (5.5)
South	-- (--)	-- (--)	-- (--)	South	0.0 (1.0)	0.0 (3.2)	0.0 (3.9)
West	-- (--)	-- (--)	-- (--)	West	0.0 (1.1)	0.0 (3.6)	0.0 (4.9)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+		Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷	No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 148
FOOT PROCEDURES
DRG(S): 225

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.9)	0.0 (3.3)	0.8 (3.5)
Northeast	0.0 (3.9)	0.0 (5.7)	0.0 (7.9)
North Central	0.0 (3.5)	0.0 (6.2)	0.0 (6.6)
South	0.0 (3.4)	0.0 (6.8)	2.0 (5.5)
West	0.0 (4.3)	0.0 (7.8)	0.0 (10.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.6)	0.0 (1.6)	0.0 (2.6)
Northeast	0.0 (1.4)	0.0 (3.6)	0.0 (5.8)
North Central	0.0 (1.1)	0.0 (2.8)	0.0 (4.2)
South	0.0 (1.2)	0.0 (3.0)	0.0 (5.2)
West	0.0 (1.4)	0.0 (3.5)	0.0 (6.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 149
SOFT TISSUE PROCEDURES
DRG(S): 226, 227

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	2.1 (1.8)	1.3 (3.1)	2.9 (3.8)	U.S.	0.0 (0.7)	0.0 (1.9)	0.0 (3.0)
Northeast	2.1 (4.0)	1.5 (5.4)	0.0 (7.2)	Northeast	0.0 (1.4)	0.0 (3.9)	0.0 (5.0)
North Central	4.3 (3.8)	0.6 (6.8)	10.7 (7.3)	North Central	0.0 (1.2)	0.0 (3.5)	0.0 (5.5)
South	1.2 (2.9)	0.0 (5.6)	0.0 (7.2)	South	0.0 (1.1)	0.0 (3.4)	0.0 (6.1)
West	1.4 (4.4)	3.5 (7.2)	0.0 (9.2)	West	0.0 (1.6)	0.0 (5.1)	0.0 (9.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 150
MAJOR THUMB OR JOINT PROCEDURES, OR OTHER HAND OR WRIST PROCS. W/ CCS
DRG(S): 228

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	65-74	75+	Region	Without CCs Age <65	65-74	75+
U.S.	0.3 (2.1)	0.0 (3.8)	0.0 (5.9)	U.S.	0.0 (1.4)	0.0 (3.0)	0.0 (5.7)
Northeast	1.4 (4.6)	0.0 (8.3)	0.0 (12.5)	Northeast	0.0 (3.3)	0.0 (10.4)	** (**)
North Central	0.0 (3.7)	0.0 (8.8)	0.0 (10.2)	North Central	0.0 (2.6)	0.0 (5.0)	0.0 (9.3)
South	0.0 (4.0)	0.0 (6.7)	0.0 (10.2)	South	0.0 (2.7)	0.0 (6.4)	0.0 (11.8)
West	0.0 (5.0)	0.0 (7.3)	0.0 (18.5)	West	0.0 (2.8)	0.0 (5.2)	0.0 (10.1)

ACTUAL DEATH RATES

	With CCs Age <65	65-74	75+		Without CCs Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 151
HAND OR WRIST PROCEDURES EXCEPT MAJOR JOINT PROCEDURES W/O CCS
DRG(S): 229

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age		
	<65	65-74	75+
U.S.	-- (--)	-- (--)	-- (--)
Northeast	-- (--)	-- (--)	-- (--)
North Central	-- (--)	-- (--)	-- (--)
South	-- (--)	-- (--)	-- (--)
West	-- (--)	-- (--)	-- (--)

Without CCs

Region	Age		
	<65	65-74	75+
U.S.	0.0 (0.7)	0.0 (2.4)	0.0 (3.6)
Northeast	0.0 (1.5)	0.0 (5.2)	0.0 (6.4)
North Central	0.0 (1.3)	0.0 (4.3)	0.0 (7.2)
South	0.0 (1.2)	0.0 (4.3)	0.0 (6.8)
West	0.0 (1.5)	0.0 (5.4)	0.0 (9.7)

ACTUAL DEATH RATES

With CCs

	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 152
LOCAL EXCISION & REMOVAL OF INT. FIX. DEVICES OF HIP & FEMUR
DRG(S): 230

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.2 (3.6)	0.0 (6.1)	5.6 (5.3)
Northeast	0.0 (8.9)	0.0 (11.3)	0.0 (14.7)
North Central	0.0 (7.5)	0.0 (13.3)	7.7 (10.7)
South	2.8 (5.5)	0.0 (10.3)	9.6 (8.4)
West	0.0 (8.1)	0.0 (16.5)	0.0 (10.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (1.2)	0.0 (4.3)	0.0 (4.1)
Northeast	0.0 (2.6)	0.0 (7.7)	0.0 (8.1)
North Central	0.4 (2.5)	0.0 (9.7)	0.0 (8.5)
South	0.0 (2.2)	0.0 (7.7)	0.0 (6.6)
West	0.0 (2.8)	0.0 (9.7)	0.0 (11.1)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 153
LOCAL EXCISION & REMOVAL OF INT. FIX. DEVICES EXCEPT HIP & FEMUR
DRG(S): 231

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.2 (1.8)	0.0 (3.4)	5.2 (4.8)	U.S.	0.0 (0.6)	0.0 (2.2)	0.0 (3.3)
Northeast	0.0 (4.1)	0.0 (8.4)	11.6 (9.2)	Northeast	0.0 (1.4)	0.0 (4.9)	0.0 (8.6)
North Central	1.0 (3.8)	0.0 (8.0)	12.5 (11.6)	North Central	0.0 (1.2)	0.0 (4.4)	0.0 (6.1)
South	0.0 (3.1)	0.0 (5.2)	0.0 (8.3)	South	0.0 (1.0)	0.0 (3.6)	0.0 (5.7)
West	0.0 (3.6)	0.0 (7.0)	0.0 (9.8)	West	0.0 (1.4)	0.0 (5.7)	0.0 (7.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 154
ARTHROSCOPY
DRG(S): 232

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (7.1)	0.0 (17.9)	** (**)
Northeast	0.0 (15.1)	** (**)	-- (--)
North Central	0.0 (15.8)	** (**)	-- (--)
South	0.0 (12.2)	-- (--)	** (**)
West	0.0 (14.6)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.8)	0.0 (8.8)	0.0 (11.1)
Northeast	0.0 (3.2)	0.0 (15.1)	** (**)
North Central	0.0 (4.4)	** (**)	** (**)
South	0.0 (3.2)	0.0 (16.3)	0.0 (14.1)
West	0.0 (4.2)	0.0 (19.3)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 155
OTHER MUSCULOSKELETAL SYSTEM & CONN. TISS. O.R. PROCEDURES
DRG(S): 233, 234

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.1 (1.7)	1.9 (2.8)	3.8 (2.7)
Northeast	0.9 (3.7)	3.7 (5.8)	4.5 (5.1)
North Central	1.5 (3.4)	2.0 (5.5)	3.9 (5.5)
South	2.9 (2.5)	0.0 (4.9)	0.0 (5.3)
West	2.6 (4.4)	2.6 (6.2)	7.2 (5.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.0 (2.2)	0.0 (2.7)
Northeast	0.0 (1.9)	0.0 (4.8)	0.0 (6.3)
North Central	0.0 (1.7)	0.0 (4.7)	0.0 (5.0)
South	0.0 (1.2)	0.0 (3.5)	0.0 (4.3)
West	0.0 (1.9)	0.0 (5.4)	0.0 (6.6)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 156
FRACTURES OF FEMUR
DRG(S): 235

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.6 (3.1)	1.8 (4.7)	7.5 (3.0)
Northeast	5.3 (6.3)	0.0 (9.4)	16.9 (5.9)
North Central	0.0 (6.0)	0.0 (14.5)	13.4 (6.0)
South	0.0 (5.7)	5.5 (8.2)	0.0 (5.1)
West	6.2 (6.8)	0.0 (8.3)	0.0 (7.5)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.4)	0.0 (5.1)	2.5 (3.2)
Northeast	0.0 (3.4)	0.0 (14.3)	0.0 (7.0)
North Central	0.0 (2.6)	0.0 (9.7)	0.0 (6.1)
South	0.0 (2.4)	0.0 (7.5)	4.8 (5.2)
West	0.0 (3.2)	0.0 (15.0)	4.8 (8.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 157
FRACTURES OF HIP & PELVIS
DRG(S): 236

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.7 (1.5)	7.2 (1.9)	12.8 (1.0)
Northeast	1.2 (3.5)	7.9 (4.3)	14.1 (1.9)
North Central	2.4 (3.0)	11.6 (3.8)	10.1 (2.0)
South	2.5 (2.8)	2.7 (3.5)	17.2 (1.8)
West	4.5 (3.3)	7.4 (4.1)	7.5 (2.4)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.4)	0.0 (2.4)	1.6 (1.3)
Northeast	0.0 (3.1)	0.0 (4.5)	1.1 (2.5)
North Central	0.0 (3.1)	0.0 (5.1)	0.0 (2.5)
South	0.0 (2.3)	0.0 (4.3)	3.6 (2.3)
West	0.0 (3.2)	0.0 (5.4)	1.2 (3.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 158
SPRAINS, STRAINS & DISLOCATIONS OF HIP, PELVIS & THIGH
DRG(S): 237

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (5.5)	5.8 (9.3)	6.2 (6.8)	U.S.	0.0 (2.8)	0.0 (7.3)	0.0 (5.6)
Northeast	0.0 (11.0)	** (**)	12.6 (13.7)	Northeast	0.0 (5.6)	** (**)	0.0 (11.7)
North Central	0.0 (10.8)	25.0 (19.3)	9.9 (12.2)	North Central	0.0 (5.0)	0.0 (12.9)	0.0 (11.2)
South	0.0 (9.8)	0.0 (11.6)	0.0 (13.0)	South	0.0 (5.3)	0.0 (14.9)	0.0 (8.9)
West	0.0 (13.7)	-- (--)	0.0 (17.0)	West	0.0 (7.6)	0.0 (12.3)	0.0 (15.9)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+		Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 159
OSTEOMYELITIS
DRG(S): 238

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.4 (2.4)	4.4 (3.2)	3.3 (3.5)
Northeast	0.0 (4.1)	5.1 (5.8)	3.5 (6.5)
North Central	1.1 (4.0)	0.0 (5.6)	7.2 (6.3)
South	0.0 (6.3)	11.8 (6.6)	0.3 (6.1)
West	0.0 (6.0)	0.0 (9.5)	0.0 (12.4)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.0)	0.0 (5.8)	0.0 (4.9)
Northeast	0.0 (4.6)	0.0 (9.8)	0.0 (7.3)
North Central	0.0 (3.8)	0.0 (11.0)	0.0 (11.8)
South	0.0 (3.4)	0.0 (11.1)	0.0 (8.5)
West	0.0 (5.1)	0.0 (17.0)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 160
PATH FRACTURES & MUSCULOSKELETAL & CONN. TISSUE MALIGNANCY
DRG(S): 239

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

	With CCs		
		Age	
Region	<65	65-74	75+
U.S.	21.0 (1.1)	14.4 (1.0)	9.4 (0.9)
Northeast	21.9 (2.5)	15.0 (2.1)	13.4 (1.9)
North Central	22.5 (2.0)	18.0 (2.1)	7.2 (1.8)
South	21.9 (1.7)	13.6 (1.8)	9.8 (1.6)
West	14.4 (2.9)	10.6 (2.4)	6.9 (2.0)

	Without CCs		
		Age	
Region	<65	65-74	75+
U.S.	4.4 (1.4)	4.6 (1.6)	2.2 (1.2)
Northeast	4.5 (3.4)	2.2 (3.8)	2.1 (2.6)
North Central	3.9 (3.1)	3.6 (3.1)	1.9 (2.1)
South	4.9 (2.1)	5.2 (2.5)	2.7 (2.0)
West	3.1 (4.2)	7.2 (4.1)	2.0 (2.7)

ACTUAL DEATH RATES

	With CCs		
		Age	
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
		Age	
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 161
CONNECTIVE TISSUE DISORDERS
DRG(S): 240, 241

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	5.4 (1.2)	4.4 (2.1)	6.4 (2.2)	U.S.	0.0 (1.1)	1.4 (2.7)	2.0 (3.0)
Northeast	5.3 (2.7)	7.2 (4.3)	6.2 (4.5)	Northeast	0.0 (2.5)	0.0 (6.8)	0.0 (6.8)
North Central	4.0 (2.6)	3.2 (3.9)	5.4 (4.5)	North Central	0.0 (2.2)	3.1 (4.8)	0.0 (5.4)
South	5.9 (2.0)	2.3 (3.4)	6.4 (3.5)	South	0.0 (1.7)	0.0 (4.0)	6.1 (5.1)
West	6.0 (2.9)	8.2 (5.7)	8.6 (5.7)	West	0.0 (3.2)	4.5 (8.2)	0.0 (6.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 162
SEPTIC ARTHRITIS
DRG(S): 242

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.7 (3.3)	0.0 (6.5)	13.2 (5.0)
Northeast	3.7 (6.6)	0.0 (14.9)	24.6 (12.1)
North Central	0.0 (6.3)	0.0 (9.6)	32.9 (10.8)
South	0.2 (5.6)	0.0 (14.5)	4.4 (7.7)
West	4.9 (8.6)	0.0 (17.3)	0.0 (11.8)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.1)	0.0 (4.8)	0.0 (6.1)
Northeast	0.0 (5.0)	0.0 (18.0)	0.0 (16.2)
North Central	0.0 (4.0)	0.0 (12.4)	0.0 (10.3)
South	0.0 (3.5)	0.0 (6.7)	0.0 (11.0)
West	0.0 (4.9)	0.0 (9.5)	0.0 (13.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 163
MEDICAL BACK PROBLEMS
DRG(S): 243

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.3 (0.5)	0.8 (0.9)	1.9 (0.8)	U.S.	0.0 (0.2)	0.3 (0.7)	0.1 (0.8)
Northeast	0.7 (1.4)	1.8 (2.1)	2.7 (1.7)	Northeast	0.0 (0.6)	0.8 (1.7)	0.0 (1.7)
North Central	0.1 (1.1)	0.2 (1.8)	1.1 (1.5)	North Central	0.0 (0.4)	0.0 (1.3)	0.2 (1.5)
South	0.2 (0.8)	0.3 (1.5)	2.2 (1.3)	South	0.0 (0.3)	0.3 (1.2)	0.2 (1.4)
West	0.1 (1.4)	1.7 (2.3)	1.4 (1.9)	West	0.0 (0.6)	0.2 (1.8)	0.0 (1.9)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 164
BONE DISEASES & SPECIFIC ARTHROPATHIES
DRG(S): 244, 245

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (2.0)	0.5 (2.2)	1.9 (1.7)
Northeast	0.0 (5.0)	2.3 (5.1)	0.0 (3.5)
North Central	0.0 (4.5)	0.0 (4.8)	1.3 (3.4)
South	0.0 (2.7)	0.1 (3.4)	3.6 (2.8)
West	0.0 (6.2)	0.0 (5.9)	1.8 (4.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.6)	0.0 (2.5)	0.0 (1.9)
Northeast	0.0 (3.7)	0.0 (5.1)	0.0 (4.1)
North Central	0.0 (3.0)	0.0 (5.0)	0.0 (3.8)
South	0.0 (2.4)	0.0 (4.1)	0.0 (3.0)
West	0.0 (5.3)	0.0 (6.9)	0.0 (6.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 165
NON-SPECIFIC ARTHROPATHIES
DRG(S): 246

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (6.3)	0.0 (8.9)	0.0 (5.4)
Northeast	0.0 (18.0)	** (**)	0.0 (16.5)
North Central	0.0 (10.6)	0.0 (13.6)	0.0 (10.8)
South	0.0 (9.9)	0.0 (19.0)	0.0 (7.5)
West	0.0 (18.7)	** (**)	0.0 (14.7)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.8)	0.0 (6.2)	0.0 (5.6)
Northeast	0.0 (6.8)	0.0 (15.2)	0.0 (17.5)
North Central	0.0 (6.4)	0.0 (12.2)	0.0 (7.9)
South	0.0 (3.9)	0.0 (9.4)	0.0 (11.2)
West	0.0 (8.0)	0.0 (16.2)	0.0 (14.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ――― Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ――― Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 166
SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN. TISSUE
DRG(S): 247

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.3 (1.8)	0.0 (3.0)	3.2 (2.9)
Northeast	0.0 (4.5)	0.0 (8.1)	0.0 (7.6)
North Central	0.8 (3.2)	0.0 (5.8)	4.4 (5.7)
South	0.0 (2.8)	0.0 (4.7)	4.8 (4.6)
West	0.0 (4.7)	0.0 (7.5)	0.0 (7.1)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.9)	0.0 (2.7)	0.0 (2.8)
Northeast	0.0 (2.8)	0.0 (6.7)	0.0 (7.1)
North Central	0.0 (1.8)	0.0 (4.7)	0.0 (5.0)
South	0.0 (1.3)	0.0 (4.6)	0.0 (5.0)
West	0.0 (2.8)	0.0 (6.8)	0.0 (6.2)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 167
TENDONITIS, MYOSITIS & BURSITIS
DRG(S): 248

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.3 (1.9)	2.9 (3.9)	0.0 (3.7)
Northeast	1.6 (4.3)	0.0 (8.2)	0.0 (7.8)
North Central	0.0 (3.7)	0.0 (7.8)	0.0 (6.9)
South	0.0 (3.2)	7.1 (6.1)	0.0 (5.9)
West	0.0 (4.7)	0.0 (11.9)	0.0 (10.7)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.2)	0.0 (3.3)	0.0 (4.0)
Northeast	0.0 (3.0)	0.0 (8.7)	0.0 (7.4)
North Central	0.0 (2.5)	0.0 (6.5)	0.0 (7.0)
South	0.0 (1.9)	0.0 (4.7)	0.0 (8.7)
West	0.0 (3.1)	0.0 (10.3)	0.0 (9.1)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 168
AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE
DRG(S): 249

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	3.2 (4.9)	0.0 (4.9)	2.8 (3.8)
Northeast	8.2 (11.1)	0.0 (11.7)	5.9 (9.3)
North Central	0.0 (10.1)	0.0 (10.3)	0.0 (8.0)
South	3.9 (7.6)	0.0 (8.1)	4.7 (5.9)
West	0.0 (12.0)	0.0 (9.8)	0.0 (8.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.3)	0.0 (3.5)	0.7 (3.3)
Northeast	0.0 (5.5)	0.0 (8.2)	0.0 (7.9)
North Central	0.0 (5.0)	0.0 (6.3)	2.6 (6.2)
South	0.0 (3.7)	0.0 (6.4)	0.0 (6.3)
West	0.0 (5.2)	0.0 (7.4)	0.0 (6.3)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 169
FX. SPRNS., STRNS. & DISL. OF FOREARM, HAND, FOOT
DRG(S): 250, 251, 252

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (2.2)	1.0 (3.9)	4.3 (2.7)
Northeast	0.0 (5.0)	3.2 (7.0)	2.8 (5.8)
North Central	0.0 (4.0)	0.0 (7.4)	1.6 (4.9)
South	0.0 (3.8)	0.0 (6.7)	8.1 (4.3)
West	0.0 (5.2)	0.0 (12.9)	0.0 (9.1)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.0 (2.7)	0.7 (2.4)
Northeast	0.0 (1.8)	0.0 (6.0)	0.0 (4.9)
North Central	0.0 (1.6)	0.0 (4.9)	2.3 (4.5)
South	0.0 (1.2)	0.0 (4.4)	0.0 (4.3)
West	0.0 (2.2)	0.0 (7.4)	0.0 (6.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 170
FX. SPRNS., STRNS. & DISL. OF UP ARM, LOW LEG, EXCEPT FOOT
DRG(S): 253, 254, 255

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.1 (1.3)	0.8 (1.9)	3.2 (1.4)	U.S.	0.0 (0.6)	0.0 (1.6)	0.5 (1.3)
Northeast	0.0 (2.8)	2.6 (3.9)	3.3 (2.6)	Northeast	0.0 (1.3)	0.0 (3.4)	0.8 (2.7)
North Central	0.0 (2.3)	0.0 (3.6)	1.9 (2.7)	North Central	0.0 (1.1)	0.0 (3.1)	0.9 (2.6)
South	0.1 (2.2)	0.3 (3.3)	1.1 (2.5)	South	0.0 (0.9)	0.0 (2.9)	0.0 (2.1)
West	0.4 (3.0)	0.9 (4.6)	9.1 (3.4)	West	0.0 (1.5)	0.0 (4.3)	0.8 (3.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 171
OTHER DXS OF MUSCULOSKELETAL SYSTEM & CONN. TISS.
DRG(S): 256

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.8 (1.6)	1.2 (3.0)	6.3 (2.9)
Northeast	2.0 (3.9)	0.0 (6.8)	4.2 (5.6)
North Central	0.6 (2.9)	4.1 (5.5)	4.0 (5.9)
South	3.2 (2.6)	0.0 (5.1)	9.4 (5.4)
West	0.0 (4.8)	0.0 (7.3)	7.7 (6.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.5 (1.1)	0.0 (3.0)	0.0 (3.3)
Northeast	1.5 (2.7)	0.0 (5.9)	0.0 (7.7)
North Central	0.0 (2.0)	0.0 (7.7)	0.0 (6.4)
South	0.8 (1.6)	0.0 (4.7)	0.0 (5.4)
West	0.0 (3.0)	0.0 (6.8)	0.0 (8.2)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 172
TOTAL MASTECTOMY FOR MALIGNANCY
DRG(S): 257, 258

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.1 (0.9)	0.3 (1.1)	0.6 (1.3)	U.S.	0.0 (0.7)	0.1 (1.0)	0.0 (1.2)
Northeast	0.0 (2.0)	0.0 (2.3)	0.0 (2.6)	Northeast	0.0 (1.6)	0.0 (2.3)	0.0 (2.7)
North Central	0.0 (1.8)	0.9 (2.2)	0.8 (2.5)	North Central	0.0 (1.4)	0.0 (2.0)	0.0 (2.3)
South	0.2 (1.7)	0.0 (2.0)	0.9 (2.4)	South	0.0 (1.2)	0.0 (1.7)	0.0 (2.1)
West	0.0 (2.0)	0.2 (2.6)	0.7 (3.3)	West	0.0 (1.6)	0.3 (2.2)	0.0 (2.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 173
SUBTOTAL MASTECTOMY FOR MALIGNANCY
DRG(S): 259, 260

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.4 (2.3)	2.8 (3.2)	5.2 (3.1)
Northeast	0.0 (3.7)	2.8 (4.7)	3.1 (5.0)
North Central	1.6 (4.8)	0.0 (7.3)	6.3 (6.1)
South	3.9 (4.6)	6.6 (6.6)	8.6 (5.8)
West	0.0 (7.0)	0.0 (9.0)	0.0 (11.1)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.6)	0.0 (2.7)	0.0 (2.9)
Northeast	0.0 (2.4)	0.0 (3.9)	0.0 (4.2)
North Central	0.0 (3.2)	0.0 (5.4)	0.0 (6.0)
South	0.0 (3.4)	0.0 (7.0)	0.0 (6.1)
West	0.0 (4.1)	0.0 (7.2)	0.0 (9.3)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 174
BREAST PROCEDURES FOR NON-MALIG. EXCEPT BIOPSY & LOC. EXCISION
DRG(S): 261

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (2.5)	0.0 (6.5)	4.2 (7.9)
Northeast	0.0 (5.3)	0.0 (12.3)	0.0 (19.5)
North Central	0.0 (6.2)	0.0 (15.0)	0.0 (17.3)
South	0.0 (4.7)	0.0 (10.0)	9.3 (11.7)
West	0.0 (4.5)	** (**)	0.0 (18.7)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (0.7)	0.0 (2.8)	0.0 (4.9)
Northeast	0.0 (1.5)	0.0 (6.1)	0.0 (12.4)
North Central	0.0 (1.5)	0.0 (6.1)	0.0 (11.6)
South	0.0 (1.2)	0.0 (5.0)	0.0 (7.1)
West	0.0 (1.7)	0.0 (5.5)	0.0 (11.5)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 175
BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY
DRG(S): 262

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (3.2)	0.0 (5.9)	0.0 (5.8)
Northeast	0.0 (6.4)	0.0 (9.4)	0.0 (10.3)
North Central	0.0 (7.4)	0.0 (13.2)	0.0 (15.0)
South	0.0 (4.7)	0.0 (11.2)	0.0 (8.6)
West	0.0 (9.5)	0.0 (15.4)	0.0 (18.7)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (1.2)	0.0 (3.0)	0.0 (4.4)
Northeast	0.0 (2.0)	0.0 (4.8)	0.0 (6.1)
North Central	0.0 (3.6)	0.0 (8.3)	** (**)
South	0.0 (1.8)	0.0 (4.8)	0.0 (6.8)
West	0.0 (4.6)	0.0 (9.8)	** (**)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 176
SKIN GRAFTS &/OR DEBRIDEMENT FOR SKIN ULCER OR CELLULITIS
DRG(S): 263, 264

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	3.0 (1.1)	5.9 (1.6)	13.8 (1.1)
Northeast	3.7 (2.2)	6.7 (3.1)	19.4 (2.2)
North Central	2.2 (2.1)	3.5 (3.3)	8.2 (2.3)
South	2.4 (1.8)	7.7 (2.8)	12.2 (1.8)
West	5.3 (3.1)	4.2 (4.4)	18.7 (3.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.4)	0.0 (2.8)	2.1 (2.4)
Northeast	0.0 (2.8)	0.0 (5.1)	0.0 (5.5)
North Central	0.0 (2.7)	0.0 (6.2)	0.0 (4.7)
South	0.0 (2.4)	0.0 (5.0)	3.3 (3.8)
West	0.0 (3.9)	0.0 (7.0)	5.0 (6.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 177
SKIN GRAFTS &/OR DEBRIDEMENT EXCEPT SKIN ULCER OR CELLULITIS
DRG(S): 265, 266

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.9 (1.4)	1.4 (2.9)	3.7 (2.7)
Northeast	0.6 (3.0)	0.0 (5.5)	4.2 (4.4)
North Central	1.7 (2.9)	2.5 (5.5)	5.0 (6.1)
South	0.5 (2.2)	2.4 (5.1)	3.6 (4.8)
West	1.3 (4.3)	0.0 (7.5)	0.0 (7.5)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (0.8)	0.0 (2.3)	2.4 (2.4)
Northeast	0.0 (1.7)	0.0 (4.4)	0.0 (4.8)
North Central	0.0 (1.5)	0.0 (4.6)	0.0 (5.6)
South	0.0 (1.2)	0.0 (4.2)	5.9 (3.8)
West	0.0 (2.0)	0.0 (5.9)	0.0 (6.4)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 178
PERIANAL & PILONIDAL PROCEDURES
DRG(S): 267

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (4.0)	0.0 (15.4)	0.0 (18.0)	U.S.	0.0 (1.0)	0.0 (10.2)	0.0 (18.6)
Northeast	0.0 (6.9)	** (**)	-- (--)	Northeast	0.0 (1.8)	0.0 (18.0)	** (**)
North Central	0.0 (8.9)	** (**)	-- (--)	North Central	0.0 (2.2)	** (**)	** (**)
South	0.0 (7.0)	** (**)	** (**)	South	0.0 (1.7)	** (**)	** (**)
West	0.0 (10.1)	** (**)	** (**)	West	0.0 (3.7)	0.0 (17.2)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 179
SKIN, SUBCUTANEOUS TISS. & BREAST PLASTIC PROCEDURES
DRG(S): 268

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.9)	0.0 (7.9)	0.0 (8.3)
Northeast	0.0 (6.2)	0.0 (16.8)	0.0 (16.3)
North Central	0.0 (5.5)	0.0 (16.1)	** (**)
South	0.0 (5.6)	0.0 (16.0)	0.0 (12.2)
West	0.0 (6.4)	0.0 (14.2)	** (**)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.4)	0.0 (3.7)	0.0 (4.9)
Northeast	0.0 (2.7)	0.0 (6.2)	0.0 (8.0)
North Central	0.0 (2.6)	0.0 (7.8)	0.0 (9.5)
South	0.0 (2.5)	0.0 (6.9)	0.0 (9.5)
West	0.0 (4.6)	0.0 (11.4)	0.0 (14.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 180
OTHER SKIN, SUBCUT. TISS. & BREAST O.R. PROCEDURES
DRG(S): 269, 270

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.8 (1.3)	1.5 (2.4)	4.1 (2.2)	U.S.	0.1 (0.8)	0.0 (2.0)	0.0 (3.0)
Northeast	0.5 (2.8)	3.9 (4.3)	5.7 (4.2)	Northeast	0.0 (1.6)	0.0 (4.2)	0.0 (6.3)
North Central	3.6 (2.4)	0.0 (4.9)	3.5 (4.7)	North Central	0.0 (1.6)	0.0 (3.9)	0.0 (6.6)
South	1.5 (2.1)	1.2 (4.2)	4.5 (3.7)	South	0.1 (1.2)	0.0 (3.2)	0.0 (4.4)
West	0.9 (3.6)	0.0 (6.1)	0.0 (6.6)	West	0.0 (2.1)	0.0 (5.3)	0.0 (9.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 181
SKIN ULCERS
DRG(S): 271

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.8 (1.9)	7.6 (2.3)	12.3 (1.4)
Northeast	2.8 (3.8)	9.1 (4.1)	16.4 (3.0)
North Central	0.0 (3.1)	4.3 (4.2)	3.8 (2.9)
South	3.1 (3.5)	12.5 (4.3)	14.7 (2.1)
West	2.6 (6.2)	0.0 (6.7)	12.7 (4.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (3.1)	6.1 (4.4)	0.0 (3.0)
Northeast	0.0 (6.9)	0.0 (8.1)	0.0 (5.5)
North Central	0.0 (6.9)	0.0 (7.8)	0.0 (5.6)
South	0.0 (4.5)	16.9 (7.3)	0.0 (5.1)
West	0.0 (10.1)	** (**)	0.0 (12.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 182
MAJOR SKIN DISORDERS
DRG(S): 272, 273

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	3.7 (2.0)	7.1 (3.0)	4.9 (2.5)
Northeast	4.5 (4.7)	7.9 (6.4)	6.6 (5.5)
North Central	5.8 (4.1)	3.5 (6.3)	1.6 (4.8)
South	1.6 (3.3)	10.8 (4.5)	5.7 (4.0)
West	4.6 (4.8)	0.0 (8.1)	7.2 (8.0)

Region	Without CCs Age <65	 65-74	 75+
U.S.	1.8 (1.6)	0.0 (3.2)	4.2 (3.3)
Northeast	4.1 (3.5)	0.0 (7.0)	0.0 (11.2)
North Central	0.7 (3.3)	0.0 (8.3)	0.0 (5.3)
South	1.9 (2.6)	0.0 (4.8)	9.7 (5.5)
West	0.0 (4.7)	0.0 (7.4)	4.6 (8.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 183
MALIGNANT BREAST DISORDERS
DRG(S): 274, 275

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	28.1 (1.9)	33.3 (2.8)	25.1 (3.4)
Northeast	28.1 (4.0)	34.0 (5.1)	24.3 (7.8)
North Central	25.3 (3.5)	47.0 (5.3)	30.2 (6.4)
South	23.6 (3.2)	27.5 (5.7)	23.0 (5.6)
West	47.5 (5.4)	19.8 (6.4)	21.4 (8.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	12.6 (4.1)	23.3 (7.3)	36.2 (6.8)
Northeast	11.3 (10.0)	0.0 (18.8)	0.0 (15.1)
North Central	26.2 (9.6)	14.0 (14.5)	6.6 (11.7)
South	11.2 (5.6)	41.7 (10.6)	72.9 (10.1)
West	0.0 (11.8)	** (**)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 184
NON-MALIGNANT BREAST DISORDERS
DRG(S): 276

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (4.5)	0.0 (10.6)	5.6 (9.1)
Northeast	0.0 (8.9)	0.0 (16.9)	-- (--)
North Central	0.0 (8.3)	0.0 (15.8)	** (**)
South	0.0 (7.1)	** (**)	0.0 (11.2)
West	0.0 (18.0)	-- (--)	24.1 (19.0)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.2)	0.0 (8.6)	0.0 (13.1)
Northeast	0.0 (4.4)	0.0 (11.2)	0.0 (19.3)
North Central	0.0 (4.7)	-- (--)	-- (--)
South	0.0 (3.2)	0.0 (13.4)	0.0 (20.0)
West	0.0 (7.5)	-- (--)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 185
CELLULITIS
DRG(S): 277, 278, 279

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.7 (0.6)	2.4 (1.0)	2.7 (0.9)	**U.S.**	0.0 (0.5)	0.0 (1.3)	0.2 (1.2)
Northeast	0.7 (1.2)	2.3 (1.9)	3.2 (1.7)	**Northeast**	0.1 (1.0)	0.0 (2.6)	0.0 (2.2)
North Central	0.6 (1.1)	3.2 (2.0)	2.7 (1.8)	**North Central**	0.0 (0.9)	0.0 (2.7)	0.0 (2.4)
South	0.9 (1.1)	2.0 (1.8)	2.6 (1.5)	**South**	0.0 (0.8)	0.0 (2.1)	0.6 (1.9)
West	0.4 (1.6)	2.1 (2.7)	1.8 (2.3)	**West**	0.0 (1.2)	0.0 (3.6)	0.0 (3.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷	**No. of Patients Who died** **Total No. Patients**	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				**% Patients Who Died**			

DRG CLUSTER: 186
TRAUMA TO SKIN, SUBCUT. TISS. & BREAST
DRG(S): 280, 281, 282

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.2 (0.9)	0.3 (2.2)	3.6 (1.4)
Northeast	0.5 (2.2)	0.0 (4.6)	5.0 (2.9)
North Central	0.1 (1.7)	1.1 (4.0)	2.7 (2.9)
South	0.0 (1.4)	0.0 (3.8)	3.5 (2.4)
West	0.5 (2.3)	0.0 (6.6)	3.0 (3.8)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (0.5)	0.0 (2.2)	0.0 (1.5)
Northeast	0.0 (1.3)	0.0 (5.3)	0.0 (3.3)
North Central	0.1 (1.1)	0.0 (4.4)	0.0 (2.9)
South	0.1 (0.8)	0.0 (3.2)	0.0 (2.4)
West	0.2 (1.5)	0.0 (6.4)	0.0 (4.0)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 187
MINOR SKIN DISORDERS
DRG(S): 283, 284

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.8 (1.5)	4.5 (2.6)	8.3 (2.7)
Northeast	3.3 (3.2)	2.4 (6.0)	7.2 (6.0)
North Central	1.2 (2.9)	3.9 (5.0)	4.9 (4.9)
South	1.3 (2.5)	4.2 (4.3)	15.8 (4.8)
West	10.0 (4.4)	9.3 (6.9)	0.0 (7.3)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.1)	0.7 (3.3)	0.0 (3.4)
Northeast	0.0 (2.7)	0.0 (7.9)	0.0 (9.2)
North Central	0.0 (2.3)	2.9 (6.6)	0.0 (6.3)
South	0.0 (1.7)	0.0 (4.7)	0.0 (5.0)
West	0.0 (3.7)	0.0 (10.4)	0.0 (11.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 188
AMPUTATION OF LOWER LIMB FOR ENDOCRINE, NUTRIT. & METABOLIC DISORDERS
DRG(S): 285

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	5.0 (3.0)	6.3 (3.8)	11.9 (4.4)
Northeast	7.4 (6.2)	4.0 (7.7)	25.4 (9.1)
North Central	6.0 (6.7)	16.6 (7.7)	10.5 (8.8)
South	0.4 (5.7)	0.0 (6.5)	8.8 (7.4)
West	7.2 (5.9)	7.5 (9.4)	0.0 (11.4)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (10.0)	0.0 (17.4)	0.0 (15.4)
Northeast	** (**)	** (**)	** (**)
North Central	0.0 (19.3)	** (**)	** (**)
South	0.0 (12.7)	-- (--)	-- (--)
West	-- (--)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 189
ADRENAL & PITUITARY PROCEDURES
DRG(S): 286

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.4 (3.2)	8.1 (5.9)	12.9 (7.6)	U.S.	0.0 (3.0)	0.0 (9.7)	0.0 (12.7)
Northeast	3.5 (7.3)	0.0 (14.4)	24.3 (17.2)	Northeast	0.0 (6.6)	0.0 (19.7)	** (**)
North Central	3.4 (7.1)	0.0 (11.3)	20.0 (17.3)	North Central	0.0 (8.2)	** (**)	** (**)
South	0.0 (4.9)	21.6 (9.6)	8.0 (10.4)	South	0.0 (4.1)	0.0 (18.7)	** (**)
West	0.0 (8.3)	0.0 (13.6)	** (**)	West	0.0 (7.3)	0.0 (17.8)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 190
SKIN GRAFTS & WOUND DEBRIDEMENT, ENDOC., NUTRIT. & META. DISORDERS
DRG(S): 287

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	2.0 (1.9)	3.5 (2.5)	15.9 (2.6)
Northeast	0.7 (3.9)	2.1 (5.6)	20.3 (4.7)
North Central	2.4 (3.6)	9.9 (4.9)	13.7 (5.0)
South	2.3 (3.1)	0.0 (4.0)	15.4 (4.5)
West	3.0 (4.7)	3.4 (7.1)	8.0 (9.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (7.4)	5.3 (8.9)	0.0 (13.6)
Northeast	0.0 (18.3)	** (**)	** (**)
North Central	0.0 (13.9)	14.3 (14.6)	** (**)
South	0.0 (11.7)	0.0 (13.7)	-- (--)
West	0.0 (19.3)	** (**)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 191
O.R. PROCEDURES FOR OBESITY
DRG(S): 288

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.9 (2.1)	** (**)	0.0 (17.3)
Northeast	0.0 (5.7)	** (**)	** (**)
North Central	0.2 (3.6)	-- (--)	** (**)
South	0.8 (3.5)	** (**)	** (**)
West	3.8 (5.2)	-- (--)	** (**)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.3)	0.0 (13.4)	** (**)
Northeast	0.0 (3.6)	** (**)	-- (--)
North Central	0.0 (2.3)	-- (--)	** (**)
South	0.0 (2.0)	** (**)	** (**)
West	0.0 (4.0)	0.0 (19.6)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 192
PARATHYROID PROCEDURES
DRG(S): 289

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (4.2)	0.0 (6.0)	3.6 (7.4)	U.S.	0.0 (2.2)	0.0 (4.0)	0.0 (5.8)
Northeast	0.0 (8.5)	0.0 (17.5)	0.0 (17.1)	Northeast	0.0 (5.0)	0.0 (12.4)	0.0 (11.8)
North Central	0.0 (10.2)	0.0 (11.6)	20.0 (17.3)	North Central	0.0 (5.5)	0.0 (8.5)	0.0 (9.9)
South	0.0 (6.7)	0.0 (9.5)	0.0 (10.5)	South	0.0 (3.5)	0.0 (6.6)	0.0 (11.0)
West	0.0 (9.7)	0.0 (13.2)	0.0 (19.3)	West	0.0 (4.7)	0.0 (7.3)	0.0 (16.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 193
THYROID PROCEDURES
DRG(S): 290

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (2.0)	0.0 (3.7)	2.9 (4.2)
Northeast	0.0 (4.7)	0.0 (6.9)	0.0 (8.9)
North Central	0.0 (4.5)	0.0 (8.5)	0.0 (8.9)
South	0.0 (3.4)	0.0 (6.2)	6.7 (6.3)
West	0.0 (3.6)	0.0 (8.8)	0.0 (12.2)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.0 (2.0)	0.0 (3.6)
Northeast	0.0 (1.8)	0.0 (5.3)	0.0 (9.5)
North Central	0.0 (1.6)	0.0 (3.9)	0.0 (6.8)
South	0.0 (1.3)	0.0 (3.3)	0.0 (5.8)
West	0.0 (1.6)	0.0 (3.8)	0.0 (8.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 194
THYROGLOSSAL PROCEDURES
DRG(S): 291

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (13.7)	-- (--)	-- (--)
Northeast	** (**)	-- (--)	-- (--)
North Central	** (**)	-- (--)	-- (--)
South	0.0 (16.3)	-- (--)	-- (--)
West	-- (--)	-- (--)	-- (--)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (2.7)	** (**)	** (**)
Northeast	0.0 (5.3)	** (**)	-- (--)
North Central	0.0 (5.5)	** (**)	** (**)
South	0.0 (5.2)	-- (--)	-- (--)
West	0.0 (6.2)	-- (--)	** (**)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 195
OTHER ENDOCRINE, NUTRIT. & META. O.R. PROCEDURES
DRG(S): 292, 293

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	2.5 (2.2)	10.8 (3.0)	20.3 (3.3)
Northeast	1.7 (5.0)	18.1 (6.4)	23.2 (6.2)
North Central	3.1 (4.8)	10.5 (6.1)	24.3 (6.1)
South	2.7 (3.4)	7.6 (4.8)	17.0 (5.9)
West	2.1 (5.6)	9.0 (8.2)	13.6 (8.7)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (3.3)	0.0 (8.1)	0.0 (6.6)
Northeast	0.0 (8.9)	** (**)	0.0 (15.6)
North Central	0.0 (6.5)	0.0 (14.5)	0.0 (12.1)
South	0.0 (4.5)	0.0 (10.3)	0.0 (11.6)
West	0.0 (12.5)	-- (--)	0.0 (14.5)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 196
DIABETES
DRG(S): 294, 295

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.2 (0.5)	3.2 (0.8)	7.3 (0.8)
Northeast	1.3 (1.1)	3.7 (1.7)	10.3 (1.7)
North Central	1.1 (0.8)	2.3 (1.5)	7.7 (1.5)
South	1.5 (0.8)	3.8 (1.2)	5.8 (1.3)
West	0.5 (1.3)	2.1 (2.2)	6.0 (2.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (0.5)	0.1 (1.0)	1.0 (1.3)
Northeast	0.0 (1.1)	0.0 (2.5)	0.6 (3.0)
North Central	0.2 (0.9)	0.0 (1.9)	0.3 (2.2)
South	0.0 (0.7)	0.3 (1.6)	2.4 (2.4)
West	0.0 (1.3)	0.0 (3.1)	0.0 (3.8)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 197
NUTRITIONAL & MISC. METABOLIC DISORDERS
DRG(S): 296, 297, 298

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	5.0 (0.5)	6.7 (0.5)	10.6 (0.4)	U.S.	0.2 (0.5)	1.0 (1.2)	1.9 (0.8)
Northeast	7.3 (1.1)	14.1 (1.3)	15.8 (0.9)	Northeast	0.1 (1.2)	0.6 (3.0)	2.0 (1.9)
North Central	4.5 (0.9)	7.3 (1.1)	9.3 (0.8)	North Central	0.2 (1.1)	1.3 (2.5)	1.1 (1.6)
South	4.4 (0.8)	7.8 (0.9)	10.6 (0.6)	South	0.2 (0.8)	1.2 (1.7)	2.7 (1.3)
West	4.5 (1.3)	7.4 (1.4)	5.9 (1.1)	West	0.3 (1.5)	0.7 (3.2)	1.1 (2.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 198
INBORN ERRORS OF METABOLISM
DRG(S): 299

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.4 (3.3)	0.0 (10.4)	42.5 (10.5)
Northeast	0.0 (7.6)	** (**)	-- (--)
North Central	0.0 (6.8)	0.0 (19.3)	19.3 (17.0)
South	5.6 (5.0)	0.0 (17.9)	** (**)
West	0.0 (8.4)	** (**)	100.0 (17.8)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.8)	0.0 (8.2)	** (**)
Northeast	0.0 (7.8)	** (**)	-- (--)
North Central	0.0 (4.5)	** (**)	** (**)
South	0.0 (4.6)	0.0 (9.8)	-- (--)
West	0.0 (9.2)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 199
ENDOCRINE DISORDERS
DRG(S): 300, 301

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	2.4 (1.5)	7.0 (2.1)	5.2 (1.8)	**U.S.**	0.0 (1.4)	0.9 (3.6)	0.9 (3.4)
Northeast	1.1 (3.7)	11.1 (4.4)	9.0 (4.3)	**Northeast**	0.0 (3.6)	2.8 (6.5)	0.0 (8.2)
North Central	2.7 (2.8)	2.9 (4.0)	7.0 (3.4)	**North Central**	0.0 (3.0)	0.0 (6.8)	0.0 (8.0)
South	2.8 (2.3)	2.0 (3.9)	3.7 (3.3)	**South**	0.0 (1.8)	0.0 (7.2)	1.9 (5.0)
West	2.2 (3.3)	13.5 (4.2)	2.3 (3.8)	**West**	0.0 (4.1)	0.0 (8.5)	0.0 (8.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷	**No. of Patients Who died** **Total No. Patients**	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				**% Patients Who Died**			

DRG CLUSTER: 200
KIDNEY TRANSPLANT
DRG(S): 302

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.8 (2.0)	0.0 (14.6)	-- (--)
Northeast	7.1 (6.2)	-- (--)	-- (--)
North Central	2.3 (4.9)	** (**)	-- (--)
South	0.9 (2.6)	** (**)	-- (--)
West	1.0 (5.3)	** (**)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.9)	0.0 (17.0)	-- (--)
Northeast	0.0 (12.4)	-- (--)	-- (--)
North Central	0.0 (10.8)	-- (--)	-- (--)
South	0.0 (4.7)	** (**)	-- (--)
West	0.0 (11.9)	** (**)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 201
KIDNEY, URETER & MAJOR BLADDER PROCEDURES FOR NEOPLASM
DRG(S): 303

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.2 (1.8)	2.1 (1.7)	4.4 (2.1)
Northeast	2.5 (3.7)	4.5 (3.8)	7.1 (4.9)
North Central	1.1 (3.8)	1.2 (3.5)	5.2 (3.8)
South	0.0 (3.4)	2.3 (2.8)	2.5 (3.6)
West	1.8 (4.0)	0.0 (4.3)	3.8 (4.8)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.9)	0.0 (2.7)	0.9 (3.6)
Northeast	0.0 (4.3)	0.0 (6.1)	0.0 (8.2)
North Central	0.0 (3.9)	0.0 (5.9)	0.0 (6.2)
South	0.0 (3.1)	0.0 (3.9)	0.7 (6.8)
West	0.0 (4.7)	0.0 (7.1)	3.2 (7.9)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 202
KIDNEY, URETER & MAJOR BLADDER PROCEDURES FOR NON-NEOPLASM
DRG(S): 304, 305

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.4 (1.0)	3.8 (1.6)	5.1 (2.0)	U.S.	0.0 (0.8)	0.8 (2.2)	0.0 (3.2)
Northeast	1.3 (2.2)	2.4 (3.5)	9.7 (3.6)	Northeast	0.0 (2.0)	0.0 (5.0)	0.0 (7.5)
North Central	1.1 (2.1)	4.0 (3.3)	2.9 (3.9)	North Central	0.0 (1.6)	0.0 (4.1)	0.0 (6.1)
South	1.7 (1.5)	4.3 (2.6)	2.6 (3.7)	South	0.0 (1.2)	2.2 (3.6)	0.0 (5.6)
West	1.3 (2.2)	4.0 (4.1)	4.7 (4.8)	West	0.0 (2.0)	0.0 (5.1)	0.0 (7.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 203
PROSTATECTOMY
DRG(S): 306, 307

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (2.8)	0.3 (2.0)	1.5 (1.6)
Northeast	0.0 (5.5)	1.0 (3.9)	1.0 (3.5)
North Central	0.0 (5.5)	0.0 (3.8)	2.9 (3.0)
South	0.0 (5.2)	0.0 (3.7)	0.8 (3.2)
West	0.0 (6.5)	0.0 (4.3)	0.7 (3.5)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (3.2)	0.0 (2.3)	0.0 (2.3)
Northeast	0.0 (6.8)	0.0 (4.9)	0.0 (5.1)
North Central	0.0 (5.4)	0.0 (4.1)	0.0 (3.8)
South	0.0 (5.6)	0.0 (4.1)	0.0 (4.6)
West	0.0 (10.0)	0.0 (5.7)	0.0 (5.9)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 204
MINOR BLADDER PROCEDURES
DRG(S): 308, 309

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.6 (2.2)	2.0 (2.5)	5.1 (2.0)
Northeast	0.0 (5.2)	0.0 (6.5)	1.8 (4.1)
North Central	0.0 (3.9)	2.4 (4.9)	9.0 (4.1)
South	2.7 (3.5)	2.8 (4.2)	6.7 (3.4)
West	4.2 (5.7)	1.6 (5.0)	0.0 (5.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.2)	0.0 (2.9)	0.7 (3.1)
Northeast	0.0 (5.6)	0.0 (7.5)	0.0 (7.1)
North Central	0.0 (4.8)	0.0 (5.7)	2.6 (6.2)
South	0.0 (3.3)	0.0 (4.7)	0.0 (5.2)
West	0.0 (4.7)	0.0 (6.6)	0.0 (7.5)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 205
TRANSURETHRAL PROCEDURES
DRG(S): 310, 311

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (1.0)	1.8 (1.2)	2.2 (1.1)
Northeast	0.0 (2.2)	3.0 (2.4)	2.1 (2.0)
North Central	0.3 (2.0)	1.2 (2.5)	2.9 (2.1)
South	0.0 (1.7)	1.0 (2.1)	2.5 (2.0)
West	0.0 (2.6)	1.3 (2.8)	1.0 (2.7)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.6)	0.0 (1.1)	0.2 (1.2)
Northeast	0.0 (1.6)	0.0 (2.2)	0.0 (2.1)
North Central	0.0 (1.4)	0.0 (2.4)	0.0 (2.4)
South	0.0 (0.9)	0.0 (1.9)	0.1 (2.4)
West	0.0 (1.7)	0.0 (2.5)	1.0 (3.1)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 206
URETHRAL PROCEDURES
DRG(S): 312, 313, 314

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.8 (2.4)	0.0 (3.2)	3.7 (2.7)
Northeast	0.0 (5.7)	0.0 (6.3)	4.0 (5.7)
North Central	0.0 (3.9)	0.0 (5.7)	2.1 (5.1)
South	0.0 (4.2)	0.0 (5.7)	4.6 (4.5)
West	6.7 (7.0)	0.0 (9.7)	3.8 (7.5)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.5)	0.0 (3.3)	0.9 (3.5)
Northeast	0.0 (3.4)	0.0 (6.9)	0.0 (6.8)
North Central	0.0 (2.6)	0.0 (6.3)	0.0 (6.6)
South	0.0 (2.6)	0.0 (6.6)	0.0 (6.2)
West	0.0 (4.0)	0.0 (6.7)	5.4 (8.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 207
OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES
DRG(S): 315

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	4.2 (1.0)	11.5 (1.5)	18.7 (1.6)
Northeast	5.2 (2.2)	10.9 (3.0)	24.3 (2.9)
North Central	6.9 (2.4)	14.1 (3.0)	17.8 (3.5)
South	3.7 (1.6)	7.9 (2.5)	16.8 (2.8)
West	2.0 (2.2)	15.5 (3.4)	10.6 (4.7)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.8)	2.1 (3.0)	0.0 (4.4)
Northeast	0.0 (4.0)	6.6 (7.3)	0.0 (8.6)
North Central	0.0 (3.4)	0.7 (5.8)	0.0 (8.2)
South	0.0 (3.0)	2.4 (5.3)	0.0 (7.9)
West	0.0 (3.8)	0.0 (6.3)	0.0 (11.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 208
RENAL FAILURE
DRG(S): 316

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	10.8 (1.2)	20.4 (1.4)	35.6 (1.0)
Northeast	11.0 (2.8)	20.0 (3.0)	37.3 (2.2)
North Central	12.7 (2.7)	18.6 (2.5)	32.0 (1.8)
South	10.3 (1.6)	22.2 (2.4)	40.6 (1.5)
West	9.8 (3.4)	20.4 (3.6)	26.8 (2.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	2.3 (2.3)	7.3 (3.8)	19.8 (3.3)
Northeast	0.0 (6.0)	0.0 (9.0)	26.8 (9.4)
North Central	2.6 (5.7)	6.8 (7.1)	23.2 (5.8)
South	3.1 (2.9)	11.2 (6.1)	16.5 (5.1)
West	0.0 (7.8)	6.8 (10.0)	15.5 (8.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 209
ADMIT FOR RENAL DIALYSIS
DRG(S): 317

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.3)	0.0 (6.4)	0.0 (9.1)
Northeast	0.0 (5.2)	0.0 (8.2)	0.0 (15.2)
North Central	0.0 (17.4)	** (**)	** (**)
South	0.0 (8.3)	0.0 (11.8)	0.0 (15.1)
West	** (**)	** (**)	0.0 (19.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (6.5)	0.0 (15.8)	-- (--)
Northeast	0.0 (7.4)	0.0 (17.4)	-- (--)
North Central	-- (--)	-- (--)	-- (--)
South	0.0 (14.3)	** (**)	-- (--)
West	** (**)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 210
KIDNEY & URINARY TRACT NEOPLASMS
DRG(S): 318, 319

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	21.2 (2.4)	23.1 (2.3)	30.3 (2.1)
Northeast	18.1 (5.4)	35.0 (5.2)	32.0 (4.4)
North Central	23.1 (4.9)	24.4 (4.5)	25.6 (3.8)
South	21.0 (3.8)	16.9 (3.9)	40.5 (3.8)
West	22.9 (6.0)	19.9 (5.7)	20.0 (4.8)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	10.7 (3.1)	3.7 (4.3)	14.4 (4.7)
Northeast	23.1 (7.9)	0.0 (8.7)	26.4 (9.8)
North Central	6.4 (6.9)	14.0 (8.3)	6.4 (9.8)
South	11.5 (4.5)	0.0 (7.5)	13.1 (7.5)
West	3.3 (7.0)	0.0 (10.2)	11.1 (12.9)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 211
KIDNEY & URINARY TRACT INFECTIONS
DRG(S): 320, 321, 322

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.8 (0.5)	3.7 (0.7)	7.2 (0.5)	U.S.	0.0 (0.5)	0.4 (1.2)	0.8 (0.9)
Northeast	0.9 (1.3)	6.2 (1.7)	9.8 (1.1)	Northeast	0.0 (1.1)	0.9 (2.7)	0.3 (2.0)
North Central	0.9 (1.0)	3.8 (1.4)	6.7 (1.0)	North Central	0.1 (0.9)	0.4 (2.5)	0.9 (2.0)
South	0.8 (0.8)	3.4 (1.1)	6.4 (0.7)	South	0.0 (0.7)	0.4 (1.8)	1.2 (1.3)
West	0.8 (1.4)	1.6 (1.9)	6.7 (1.3)	West	0.0 (1.2)	0.0 (2.9)	0.0 (2.6)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 212
URINARY STONES &/OR ESW LITHOTRIPSY
DRG(S): 323, 324

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (0.7)	0.5 (1.4)	1.4 (1.7)
Northeast	0.0 (1.3)	0.5 (2.9)	1.9 (3.6)
North Central	0.2 (1.2)	0.7 (2.7)	0.8 (3.5)
South	0.2 (1.1)	0.0 (2.2)	0.9 (2.7)
West	0.0 (1.9)	2.1 (3.9)	3.1 (4.8)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.4)	0.0 (1.3)	0.0 (2.1)
Northeast	0.0 (0.9)	0.0 (2.7)	0.0 (4.8)
North Central	0.0 (0.7)	0.0 (2.3)	0.0 (3.7)
South	0.0 (0.6)	0.0 (2.1)	0.0 (3.5)
West	0.0 (1.1)	0.0 (3.3)	0.0 (5.1)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 213
KIDNEY & URINARY TRACT SIGNS & SYMPTOMS
DRG(S): 325, 326, 327

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.7 (1.6)	4.2 (2.2)	4.9 (1.6)
Northeast	1.2 (3.3)	3.5 (4.0)	4.4 (3.5)
North Central	0.6 (3.1)	1.2 (4.2)	4.3 (3.1)
South	0.7 (2.5)	6.9 (3.8)	6.2 (2.4)
West	0.0 (5.2)	5.5 (6.4)	2.9 (4.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.3)	0.0 (2.6)	0.0 (2.5)
Northeast	0.0 (3.0)	0.0 (5.1)	0.0 (4.5)
North Central	0.0 (2.7)	0.0 (6.2)	0.0 (5.3)
South	0.0 (1.8)	0.0 (4.0)	0.0 (4.1)
West	0.0 (4.0)	0.0 (7.0)	0.0 (7.6)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 214
URETHRAL STRICTURE
DRG(S): 328, 329, 330

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.5)	0.0 (5.2)	3.8 (3.8)
Northeast	0.0 (9.7)	0.0 (12.1)	2.7 (7.6)
North Central	0.0 (5.7)	0.0 (8.3)	1.1 (7.4)
South	0.0 (5.6)	0.0 (9.5)	7.5 (6.0)
West	0.0 (12.3)	0.0 (16.3)	0.0 (11.4)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.7)	0.0 (6.6)	0.0 (7.0)
Northeast	0.0 (9.4)	0.0 (14.3)	0.0 (13.3)
North Central	0.0 (7.1)	0.0 (10.7)	0.0 (11.7)
South	0.0 (5.2)	0.0 (10.3)	0.0 (13.4)
West	0.0 (12.8)	-- (--)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 215
OTHER KIDNEY & URINARY TRACT DXS
DRG(S): 331, 332, 333

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	3.0 (0.9)	5.1 (1.4)	7.0 (1.3)
Northeast	2.8 (1.9)	4.4 (2.8)	6.7 (2.8)
North Central	2.0 (1.9)	4.3 (2.9)	8.7 (2.4)
South	4.3 (1.6)	7.0 (2.2)	6.6 (2.3)
West	1.7 (2.2)	2.3 (3.7)	5.3 (3.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.1)	0.0 (2.3)	4.9 (2.3)
Northeast	0.0 (2.1)	0.0 (4.7)	4.8 (4.7)
North Central	0.0 (2.2)	0.0 (4.4)	1.4 (4.5)
South	0.0 (1.7)	0.0 (3.8)	10.2 (4.1)
West	0.0 (2.9)	0.0 (7.1)	0.0 (5.8)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 216
MAJOR MALE PELVIC PROCEDURES
DRG(S): 334, 335

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.4)	2.1 (1.6)	3.5 (2.3)	U.S.	0.0 (2.2)	0.2 (1.9)	0.0 (3.4)
Northeast	0.0 (6.0)	0.0 (3.7)	4.8 (4.6)	Northeast	0.0 (5.9)	0.0 (4.5)	0.0 (7.5)
North Central	0.0 (5.1)	2.1 (4.0)	12.8 (6.0)	North Central	0.0 (4.5)	0.5 (3.7)	0.0 (7.1)
South	0.0 (4.2)	4.5 (3.0)	0.9 (3.7)	South	0.0 (3.4)	0.0 (3.6)	0.0 (6.2)
West	0.0 (4.8)	1.1 (2.8)	0.0 (5.2)	West	0.0 (5.4)	0.4 (3.7)	0.0 (6.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ― Total No. Patients	÷	÷	÷	No. of Patients Who died ― Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 217
TRANSURETHRAL PROSTATECTOMY
DRG(S): 336, 337

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.2 (0.8)	0.4 (0.5)	1.4 (0.5)
Northeast	0.9 (1.8)	0.7 (1.2)	1.5 (1.1)
North Central	0.0 (1.6)	0.6 (1.1)	1.8 (1.0)
South	0.0 (1.5)	0.3 (0.9)	1.2 (0.9)
West	0.0 (1.6)	0.2 (1.1)	1.0 (1.2)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.1 (0.8)	0.0 (0.6)	0.0 (0.7)
Northeast	0.0 (1.6)	0.0 (1.2)	0.0 (1.5)
North Central	0.0 (1.5)	0.0 (1.2)	0.0 (1.4)
South	0.2 (1.4)	0.0 (1.2)	0.0 (1.3)
West	0.0 (1.9)	0.0 (1.5)	0.0 (1.9)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 218
TESTES PROCEDURES FOR MALIGNANCY
DRG(S): 338

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	65-74	75+
U.S.	0.8 (3.5)	3.7 (2.4)	1.4 (2.2)
Northeast	0.0 (7.4)	2.6 (4.8)	0.0 (4.2)
North Central	2.7 (6.4)	0.0 (5.3)	4.4 (4.7)
South	0.0 (6.5)	8.7 (4.3)	1.2 (4.0)
West	0.0 (8.2)	1.7 (5.0)	0.0 (5.5)

Region	Without CCs Age <65	65-74	75+
U.S.	0.0 (2.4)	0.9 (3.6)	0.0 (3.0)
Northeast	0.0 (4.7)	3.5 (7.2)	0.0 (5.1)
North Central	0.0 (5.1)	0.0 (7.4)	0.0 (5.9)
South	0.0 (4.3)	0.0 (6.2)	0.0 (6.0)
West	0.0 (5.0)	0.0 (9.0)	0.0 (7.5)

ACTUAL DEATH RATES

	With CCs Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 219
TESTES PROCEDURES FOR NON-MALIGNANCY
DRG(S): 339, 340

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.7)	0.0 (4.3)	0.0 (5.2)
Northeast	0.0 (5.3)	0.0 (7.1)	0.0 (10.0)
North Central	0.0 (5.1)	0.0 (7.9)	0.0 (9.1)
South	0.0 (4.9)	0.0 (8.1)	0.0 (8.8)
West	0.0 (6.6)	** (**)	** (**)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.8)	0.0 (2.7)	0.0 (4.4)
Northeast	0.0 (1.5)	0.0 (5.4)	0.0 (8.3)
North Central	0.0 (1.6)	0.0 (4.8)	0.0 (7.6)
South	0.0 (1.4)	0.0 (5.4)	0.0 (9.9)
West	0.0 (2.0)	0.0 (6.7)	0.0 (9.7)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 220
PENIS PROCEDURES
DRG(S): 341

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.5 (2.0)	0.3 (2.0)	1.7 (2.1)	U.S.	0.0 (1.2)	0.0 (1.8)	0.0 (2.9)
Northeast	0.0 (5.2)	1.9 (5.3)	5.2 (4.7)	Northeast	0.0 (3.0)	0.0 (4.3)	0.0 (6.9)
North Central	0.0 (3.6)	0.0 (4.6)	2.9 (4.6)	North Central	0.0 (2.5)	0.0 (4.2)	0.0 (7.0)
South	0.8 (3.4)	0.0 (2.9)	0.1 (3.2)	South	0.0 (2.0)	0.0 (2.7)	0.0 (4.2)
West	1.4 (4.6)	0.0 (4.7)	0.0 (5.1)	West	0.0 (2.6)	0.0 (4.0)	0.0 (6.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 221
CIRCUMCISION
DRG(S): 342, 343

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.5)	0.0 (10.1)	10.8 (7.7)
Northeast	0.0 (8.6)	** (**)	0.0 (12.4)
North Central	0.0 (11.0)	** (**)	0.0 (15.2)
South	0.0 (6.2)	0.0 (12.0)	30.0 (12.9)
West	** (**)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.0)	0.0 (9.5)	0.0 (9.8)
Northeast	0.0 (4.9)	0.0 (13.8)	0.0 (12.0)
North Central	0.0 (7.7)	** (**)	** (**)
South	0.0 (4.7)	0.0 (15.7)	** (**)
West	0.0 (11.7)	** (**)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 222
OTHER MALE REPRO. SYSTEM O.R. PROCEDURES FOR MALIGNANCY
DRG(S): 344

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (5.3)	5.6 (3.9)	6.8 (4.1)	0.0 (5.2)	0.0 (5.1)	0.0 (6.7)
Northeast	0.0 (12.3)	0.0 (12.9)	8.2 (11.0)	0.0 (14.5)	0.0 (12.9)	0.0 (16.5)
North Central	0.0 (10.0)	8.5 (8.0)	8.7 (8.1)	0.0 (10.6)	0.0 (11.5)	0.0 (8.8)
South	0.0 (9.9)	6.2 (6.3)	7.2 (7.3)	0.0 (8.3)	0.0 (9.7)	0.0 (15.3)
West	0.0 (10.5)	3.9 (7.6)	4.0 (7.8)	0.0 (10.4)	0.0 (8.5)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷	÷	÷	÷
	=	=	=	=	=	=
% Patients Who Died						

DRG CLUSTER: 223
OTHER MALE REPRO. SYSTEM O.R. PROCEDURES EXCEPT FOR MALIGNANCY
DRG(S): 345

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	3.8 (4.9)	1.7 (4.4)	0.0 (3.8)
Northeast	0.0 (8.3)	2.6 (7.8)	0.0 (8.3)
North Central	0.0 (9.6)	3.1 (8.3)	0.0 (6.8)
South	14.5 (9.5)	0.0 (10.3)	0.0 (6.1)
West	0.0 (13.0)	0.0 (9.4)	0.0 (15.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (5.7)	0.0 (7.2)	0.0 (9.1)
Northeast	0.0 (17.0)	0.0 (13.0)	0.0 (17.0)
North Central	0.0 (9.5)	0.0 (13.0)	0.0 (19.3)
South	0.0 (10.6)	** (**)	0.0 (13.8)
West	0.0 (11.5)	0.0 (12.6)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 224
MALIGNANCY, MALE REPRO. SYSTEM
DRG(S): 346, 347

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	30.0 (3.1)	22.8 (2.1)	17.9 (1.7)	U.S.	2.7 (4.1)	8.6 (3.8)	9.3 (3.6)
Northeast	29.3 (7.4)	23.5 (4.3)	19.3 (3.7)	Northeast	0.0 (11.0)	0.0 (6.8)	0.0 (7.9)
North Central	38.2 (5.7)	23.4 (4.0)	22.0 (3.1)	North Central	4.3 (8.0)	0.0 (8.6)	3.3 (7.1)
South	10.8 (5.4)	24.6 (3.4)	19.3 (2.9)	South	3.1 (5.7)	14.1 (6.5)	15.3 (5.5)
West	50.5 (7.0)	15.1 (5.8)	4.6 (4.4)	West	0.0 (13.5)	23.6 (9.3)	18.3 (11.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 225
BENIGN PROSTATIC HYPERTROPHY
DRG(S): 348, 349

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.5 (3.0)	1.0 (2.3)	2.3 (2.1)
Northeast	5.0 (5.3)	0.0 (4.2)	2.1 (4.1)
North Central	0.0 (5.9)	1.5 (4.7)	2.6 (4.0)
South	0.0 (5.5)	2.1 (3.9)	3.1 (3.7)
West	0.0 (7.6)	0.0 (6.1)	0.0 (5.8)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (3.1)	3.6 (3.2)	0.0 (3.8)
Northeast	0.0 (5.9)	0.0 (4.7)	0.0 (6.6)
North Central	0.0 (6.6)	0.0 (7.8)	0.0 (8.7)
South	0.0 (5.3)	12.7 (6.0)	0.0 (6.2)
West	0.0 (8.9)	0.0 (10.0)	0.0 (13.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 226
INFLAMMATION OF MALE REPRO. SYSTEM
DRG(S): 350

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.2 (1.5)	2.5 (2.6)	0.5 (2.8)
Northeast	0.0 (3.1)	1.7 (5.0)	2.3 (5.8)
North Central	0.0 (3.1)	0.0 (4.7)	0.0 (5.5)
South	0.5 (2.3)	5.8 (4.3)	0.0 (4.5)
West	0.0 (4.0)	0.0 (8.6)	0.0 (7.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.1)	0.0 (3.3)	0.0 (4.2)
Northeast	0.0 (2.6)	0.0 (6.2)	0.0 (9.6)
North Central	0.0 (2.2)	0.0 (5.8)	0.0 (7.0)
South	0.0 (1.8)	0.0 (6.0)	0.0 (7.3)
West	0.0 (3.1)	0.0 (12.5)	0.0 (11.7)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 227
STERILIZATION, MALE
DRG(S): 351

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	-- (--)	-- (--)	-- (--)
Northeast	-- (--)	-- (--)	-- (--)
North Central	-- (--)	-- (--)	-- (--)
South	-- (--)	-- (--)	-- (--)
West	-- (--)	-- (--)	-- (--)

Region	Without CCs Age <65	 65-74	 75+
U.S.	** (**)	-- (--)	-- (--)
Northeast	-- (--)	-- (--)	-- (--)
North Central	-- (--)	-- (--)	-- (--)
South	** (**)	-- (--)	-- (--)
West	-- (--)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 228
OTHER MALE REPRO. SYSTEM DXS
DRG(S): 352

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (5.5)	10.7 (9.8)	11.4 (8.5)	U.S.	0.0 (2.4)	0.0 (11.2)	0.0 (8.6)
Northeast	0.0 (9.3)	** (**)	16.4 (17.4)	Northeast	0.0 (5.0)	** (**)	0.0 (11.6)
North Central	0.0 (9.2)	** (**)	8.3 (15.5)	North Central	0.0 (4.6)	** (**)	-- (--)
South	0.0 (12.6)	0.0 (13.1)	4.1 (13.1)	South	0.0 (3.7)	** (**)	0.0 (14.4)
West	0.0 (16.4)	** (**)	** (**)	West	0.0 (7.6)	0.0 (19.9)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 229
PELVIS EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY
DRG(S): 353

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.9)	3.6 (7.3)	16.9 (9.1)
Northeast	0.0 (7.9)	0.0 (17.3)	42.5 (15.4)
North Central	0.0 (9.1)	18.4 (16.6)	0.0 (16.8)
South	0.0 (6.3)	0.0 (10.5)	5.7 (15.1)
West	0.0 (9.5)	0.0 (19.6)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.3)	0.0 (7.6)	0.0 (10.3)
Northeast	0.0 (7.3)	** (**)	0.0 (19.3)
North Central	0.0 (6.9)	0.0 (12.4)	0.0 (15.2)
South	0.0 (5.3)	0.0 (11.3)	0.0 (20.0)
West	0.0 (7.7)	** (**)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died ÷ Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 230
UTERINE & ADNEXA PROCEDURES FOR NON-OVARIAN/ADNEXAL MALIGNANCY
DRG(S): 354, 355

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	1.3 (1.9)	0.0 (2.2)	1.0 (2.7)
Northeast	1.3 (3.8)	0.0 (5.1)	2.1 (5.5)
North Central	0.9 (3.6)	0.0 ([illegible].1)	2.4 (6.0)
South	2.1 (3.2)	0.0 (4.1)	0.0 (4.3)
West	0.0 (4.7)	0.0 (4.6)	0.0 (6.3)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (1.0)	0.0 (1.9)	0.0 (3.0)
Northeast	0.0 (2.3)	0.0 (4.0)	0.0 (6.4)
North Central	0.0 (1.9)	0.0 (3.9)	0.0 (5.7)
South	0.0 (1.6)	0.0 (3.2)	0.0 (5.2)
West	0.0 (2.3)	0.0 (4.6)	0.0 (7.4)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 231
FEMALE REPRO. SYSTEM FOR RECONSTRUCTIVE PROCEDURES
DRG(S): 356

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (1.6)	0.0 (2.1)	0.9 (2.6)
Northeast	0.0 (3.7)	0.0 (5.6)	0.0 (7.1)
North Central	0.0 (3.2)	0.0 (4.3)	3.6 (5.2)
South	0.0 (2.5)	0.0 (3.3)	0.0 (4.2)
West	0.0 (3.6)	0.0 (4.2)	0.0 (5.4)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.7)	0.0 (1.2)	0.0 (1.9)
Northeast	0.0 (1.9)	0.0 (3.3)	0.0 (4.5)
North Central	0.0 (1.4)	0.0 (2.4)	0.0 (3.6)
South	0.0 (1.0)	0.0 (1.9)	0.0 (3.3)
West	0.0 (1.4)	0.0 (2.4)	0.0 (3.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 232
UTERINE & ADNEXA PROCEDURES FOR OVARIAN OR ADNEXAL MALIGNANCY
DRG(S): 357

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	2.7 (1.8)	4.9 (2.4)	9.9 (3.3)
Northeast	3.0 (3.7)	3.7 (4.9)	18.1 (6.8)
North Central	3.4 (3.6)	4.6 (4.8)	8.3 (6.2)
South	1.7 (3.2)	8.4 (4.1)	5.3 (5.4)
West	3.0 (4.1)	0.0 (6.0)	11.5 (9.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.0)	0.0 (4.6)	0.0 (6.5)
Northeast	0.0 (3.9)	0.0 (9.0)	0.0 (11.9)
North Central	0.0 (3.9)	0.0 (9.4)	0.0 (13.3)
South	0.0 (3.4)	0.0 (7.[illegible])	0.0 (10.1)
West	0.0 (5.2)	0.0 (11.6)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 233
UTERINE & ADNEXA PROCEDURES FOR NON-MALIGNANCY
DRG(S): 358, 359

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	 65-74	 75+
U.S.	0.0 (0.4)	0.3 (1.6)	2.1 (2.2)
Northeast	0.0 (1.0)	0.8 (3.5)	4.8 (4.2)
North Central	0.1 (0.9)	0.0 (3.3)	1.2 (4.1)
South	0.0 (0.7)	0.1 (2.5)	1.6 (3.8)
West	0.0 (0.9)	0.7 (3.7)	0.0 (5.7)

Without CCs

Region	Age <65	 65-74	 75+
U.S.	0.0 (0.2)	0.1 (1.0)	0.0 (1.7)
Northeast	0.0 (0.5)	0.0 (2.1)	0.0 (3.8)
North Central	0.0 (0.4)	0.0 (2.0)	0.0 (3.4)
South	0.0 (0.3)	0.3 (1.7)	0.0 (2.9)
West	0.0 (0.4)	0.0 (2.5)	0.0 (4.1)

ACTUAL DEATH RATES

With CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 234
VAGINA, CERVIX & VULVA PROCEDURES
DRG(S): 360

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs				Without CCs		
	Age				Age		
Region	<65	65-74	75+	Region	<65	65-74	75+
U.S.	4.3 (2.2)	0.0 (4.3)	9.0 (4.0)	U.S.	0.0 (1.1)	0.0 (3.5)	0.0 (3.6)
Northeast	6.8 (4.6)	0.0 (9.4)	14.2 (6.4)	Northeast	0.0 (2.1)	0.0 (5.7)	0.0 (7.5)
North Central	1.7 (5.0)	0.0 (9.9)	0.0 (8.6)	North Central	0.0 (2.6)	0.0 (9.2)	0.0 (7.1)
South	5.7 (3.5)	0.0 (6.3)	11.7 (7.6)	South	0.0 (1.7)	0.0 (5.5)	0.0 (5.8)
West	0.0 (5.7)	0.0 (11.8)	2.8 (10.8)	West	0.0 (3.5)	0.0 (11.6)	0.0 (9.6)

ACTUAL DEATH RATES

	With CCs				Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 235
LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION
DRG(S): 361

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.3 (2.1)	0.0 (13.5)	22.6 (18.4)
Northeast	0.0 (4.5)	0.0 (19.0)	-- (--)
North Central	1.0 (3.9)	** (**)	** (**)
South	0.0 (3.7)	** (**)	** (**)
West	0.0 (4.5)	** (**)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.7)	0.0 (11.9)	** (**)
Northeast	0.0 (1.3)	0.0 (18.4)	** (**)
North Central	0.0 (1.7)	** (**)	-- (--)
South	0.0 (1.3)	0.0 (17.4)	-- (--)
West	0.0 (2.0)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 236
ENDOSCOPIC TUBAL INTERRUPTION
DRG(S): 362

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (7.7)	-- (--)	-- (--)
Northeast	0.0 (14.1)	-- (--)	-- (--)
North Central	** (**)	-- (--)	-- (--)
South	0.0 (12.4)	-- (--)	-- (--)
West	0.0 (14.6)	-- (--)	-- (--)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (3.4)	-- (--)	-- (--)
Northeast	0.0 (5.7)	-- (--)	-- (--)
North Central	0.0 (11.5)	-- (--)	-- (--)
South	0.0 (5.4)	-- (--)	-- (--)
West	0.0 (9.1)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 237
D&C, CONIZATION & RADIO-IMPLANT FOR MALIGNANCY
DRG(S): 363

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	6.6 (4.0)	4.2 (4.2)	8.8 (5.2)
Northeast	10.8 (9.9)	9.5 (7.3)	4.1 (9.5)
North Central	0.0 (7.1)	3.7 (8.1)	1.3 (7.8)
South	12.6 (6.5)	0.0 (7.2)	13.1 (14.0)
West	0.0 (11.3)	0.0 (18.1)	41.8 (14.7)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (1.9)	0.0 (3.8)	0.0 (4.2)
Northeast	0.0 (3.3)	0.0 (8.3)	0.0 (7.8)
North Central	0.0 (4.3)	0.0 (7.5)	0.0 (7.7)
South	0.0 (3.0)	0.0 (5.4)	0.0 (6.6)
West	0.0 (6.0)	0.0 (14.8)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 238
D&C, CONIZATION EXCEPT FOR MALIGNANCY
DRG(S): 364

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.5)	0.0 (4.2)	1.3 (4.4)
Northeast	0.0 (3.0)	0.0 (8.4)	4.0 (7.7)
North Central	0.0 (3.1)	0.0 (10.3)	0.0 (9.9)
South	0.0 (2.3)	0.0 (6.0)	0.0 (6.5)
West	0.0 (4.6)	0.0 (12.3)	** (**)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.9)	0.0 (4.2)	0.0 (4.1)
Northeast	0.0 (1.5)	0.0 (7.6)	0.0 (7.3)
North Central	0.0 (2.2)	0.0 (8.5)	0.0 (10.1)
South	0.0 (1.4)	0.0 (6.9)	0.0 (6.0)
West	0.0 (3.0)	0.0 (15.5)	0.0 (17.5)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 239
OTHER FEMALE REPRO. SYSTEM O.R. PROCEDURES
DRG(S): 365

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.8 (2.0)	16.0 (3.6)	10.8 (4.6)	U.S.	0.0 (1.4)	0.0 (5.9)	0.0 (7.8)
Northeast	2.6 (5.1)	35.7 (8.7)	15.0 (9.7)	Northeast	0.0 (3.2)	0.0 (18.3)	** (**)
North Central	4.0 (4.0)	14.1 (8.1)	13.7 (7.1)	North Central	0.0 (3.2)	0.0 (10.8)	0.0 (13.1)
South	0.7 (3.2)	12.1 (5.1)	0.7 (9.7)	South	0.0 (2.2)	0.0 (10.0)	0.0 (12.1)
West	0.4 (4.7)	7.0 (10.2)	11.6 (13.1)	West	0.0 (3.2)	0.0 (12.1)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 240
MALIGNANCY, FEMALE REPRO. SYSTEM
DRG(S): 366, 367

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	28.2 (1.9)	34.0 (2.6)	42.1 (2.7)
Northeast	25.4 (4.8)	50.7 (7.2)	43.7 (4.8)
North Central	21.6 (3.7)	30.7 (4.7)	35.8 (5.9)
South	33.9 (3.0)	26.4 (3.8)	50.2 (4.6)
West	27.7 (5.2)	62.3 (9.0)	28.3 (7.1)

Region	Without CCs Age <65	 65-74	 75+
U.S.	7.9 (2.3)	9.7 (5.2)	22.7 (6.1)
Northeast	23.1 (7.0)	40.7 (13.7)	19.4 (13.6)
North Central	17.9 (6.0)	12.7 (9.7)	35.1 (9.7)
South	4.1 (2.8)	0.0 (7.9)	13.2 (9.9)
West	0.0 (8.8)	0.0 (15.3)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 241
INFECTIONS, FEMALE REPRO. SYSTEM
DRG(S): 368

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.2 (1.1)	0.0 (12.2)	0.0 (7.3)
Northeast	0.6 (2.4)	-- (--)	0.0 (19.0)
North Central	0.0 (2.0)	0.0 (15.8)	0.0 (9.2)
South	0.3 (1.7)	** (**)	0.0 (19.3)
West	0.0 (3.2)	** (**)	** (**)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.6)	0.0 (13.7)	0.0 (13.0)
Northeast	0.0 (1.3)	** (**)	** (**)
North Central	0.0 (1.1)	** (**)	** (**)
South	0.0 (0.9)	** (**)	0.0 (17.5)
West	0.0 (1.6)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 242
MENSTRUAL & OTHER FEMALE REPRO. SYSTEM DISORDERS
DRG(S): 369

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.1 (1.5)	2.4 (6.0)	5.7 (4.7)	U.S.	0.0 (0.7)	0.0 (6.0)	0.0 (5.7)
Northeast	0.0 (3.1)	0.0 (13.2)	0.0 (9.4)	Northeast	0.0 (1.4)	0.0 (13.5)	0.0 (11.6)
North Central	0.0 (2.8)	8.1 (11.0)	0.0 (9.8)	North Central	0.0 (1.5)	0.0 (13.5)	0.0 (9.8)
South	0.0 (2.4)	0.0 (9.2)	4.9 (7.4)	South	0.0 (1.2)	0.0 (9.3)	0.0 (11.6)
West	1.0 (3.9)	** (**)	25.8 (12.5)	West	0.0 (2.2)	0.0 (14.5)	0.0 (13.9)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 243
CESAREAN SECTION
DRG(S): 370, 371

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	65-74	75+
U.S.	0.1 (0.4)	-- (--)	-- (--)
Northeast	0.0 (0.7)	-- (--)	-- (--)
North Central	0.1 (0.8)	-- (--)	-- (--)
South	0.1 (0.7)	-- (--)	-- (--)
West	0.1 (0.9)	-- (--)	-- (--)

Region	Without CCs Age <65	65-74	75+
U.S.	0.0 (0.2)	-- (--)	-- (--)
Northeast	0.0 (0.4)	-- (--)	-- (--)
North Central	0.0 (0.4)	-- (--)	-- (--)
South	0.0 (0.3)	-- (--)	-- (--)
West	0.0 (0.4)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 244
VAGINAL DELIVERY W/ COMPLICATING DXS
DRG(S): 372

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	65-74	75+	Region	Without CCs Age <65	65-74	75+
U.S.	0.0 (0.6)	-- (--)	-- (--)	U.S.	0.0 (0.4)	-- (--)	-- (--)
Northeast	0.0 (1.2)	-- (--)	-- (--)	Northeast	0.0 (0.9)	-- (--)	-- (--)
North Central	0.0 (1.3)	-- (--)	-- (--)	North Central	0.0 (0.9)	-- (--)	-- (--)
South	0.0 (1.2)	-- (--)	-- (--)	South	0.0 (0.8)	-- (--)	-- (--)
West	0.0 (1.3)	-- (--)	-- (--)	West	0.0 (0.9)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	65-74	75+		Without CCs Age <65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷	No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 245
VAGINAL DELIVERY W/O COMPLICATING DXS
DRG(S): 373

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	65-74	75+
U.S.	0.0 (0.5)	-- (--)	-- (--)
Northeast	0.0 (1.1)	-- (--)	-- (--)
North Central	0.0 (1.0)	-- (--)	-- (--)
South	0.0 (0.9)	-- (--)	-- (--)
West	0.2 (1.1)	-- (--)	-- (--)

Region	Without CCs Age <65	65-74	75+
U.S.	0.0 (0.1)	-- (--)	-- (--)
Northeast	0.0 (0.2)	-- (--)	-- (--)
North Central	0.0 (0.2)	-- (--)	-- (--)
South	0.0 (0.2)	-- (--)	-- (--)
West	0.0 (0.2)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 246
VAGINAL DELIVERY W/ STERILIZATION &/OR D&C
DRG(S): 374

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (1.2)	-- (--)	-- (--)
Northeast	0.0 (3.4)	-- (--)	-- (--)
North Central	0.0 (2.7)	-- (--)	-- (--)
South	0.0 (2.0)	-- (--)	-- (--)
West	0.0 (2.4)	-- (--)	-- (--)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.3)	-- (--)	-- (--)
Northeast	0.0 (0.9)	-- (--)	-- (--)
North Central	0.0 (0.7)	-- (--)	-- (--)
South	0.0 (0.5)	-- (--)	-- (--)
West	0.0 (0.8)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 247
VAGINAL DELIVERY W/O O.R. PROCEDURES EXCEPT STERIL. &/OR D&C
DRG(S): 375

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (4.6)	-- (--)	-- (--)
Northeast	0.0 (12.8)	-- (--)	-- (--)
North Central	0.0 (10.4)	-- (--)	-- (--)
South	0.0 (7.6)	-- (--)	-- (--)
West	0.0 (8.2)	-- (--)	-- (--)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (3.2)	-- (--)	-- (--)
Northeast	0.0 (8.3)	-- (--)	-- (--)
North Central	0.0 (7.6)	-- (--)	-- (--)
South	0.0 (6.0)	-- (--)	-- (--)
West	0.0 (5.2)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 248
POSTPARTUM & POSTABORTION DXS W/O O.R. PROCEDURES
DRG(S): 376

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs			Region	Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
U.S.	0.3 (2.0)	-- (--)	-- (--)	U.S.	0.0 (1.0)	-- (--)	-- (--)
Northeast	0.0 (4.9)	-- (--)	-- (--)	Northeast	0.0 (2.1)	-- (--)	-- (--)
North Central	0.0 (3.7)	-- (--)	-- (--)	North Central	0.0 (2.0)	-- (--)	-- (--)
South	0.0 (4.1)	-- (--)	-- (--)	South	0.0 (1.7)	-- (--)	-- (--)
West	1.0 (3.9)	-- (--)	-- (--)	West	0.0 (2.3)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs				Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 249
POSTPARTUM & POSTABORTION DXS W/ O.R. PROCEDURES
DRG(S): 377

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (2.5)	-- (--)	-- (--)
Northeast	0.0 (5.1)	-- (--)	-- (--)
North Central	0.0 (5.2)	-- (--)	-- (--)
South	0.0 (4.4)	-- (--)	-- (--)
West	0.0 (5.3)	-- (--)	-- (--)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.7)	-- (--)	-- (--)
Northeast	0.0 (3.6)	-- (--)	-- (--)
North Central	0.0 (3.3)	-- (--)	-- (--)
South	0.0 (3.1)	-- (--)	-- (--)
West	0.0 (3.7)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 250
ECTOPIC PREGNANCY
DRG(S): 378

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.1)	-- (--)	-- (--)
Northeast	0.0 (2.2)	-- (--)	-- (--)
North Central	0.0 (2.2)	-- (--)	-- (--)
South	0.0 (2.0)	-- (--)	-- (--)
West	0.0 (2.2)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.7)	-- (--)	-- (--)
Northeast	0.0 (1.4)	-- (--)	-- (--)
North Central	0.0 (1.4)	-- (--)	-- (--)
South	0.0 (1.2)	-- (--)	-- (--)
West	0.0 (1.4)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 251
THREATENED ABORTION
DRG(S): 379

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.1)	-- (--)	-- (--)
Northeast	0.0 (2.2)	-- (--)	-- (--)
North Central	0.0 (2.1)	-- (--)	-- (--)
South	0.0 (1.9)	-- (--)	-- (--)
West	0.0 (2.5)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.5)	-- (--)	-- (--)
Northeast	0.0 (1.1)	-- (--)	-- (--)
North Central	0.0 (1.0)	-- (--)	-- (--)
South	0.0 (0.9)	-- (--)	-- (--)
West	0.0 (1.1)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 252
ABORTION W/O D&C
DRG(S): 380

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.0)	-- (--)	-- (--)
Northeast	0.0 (6.9)	-- (--)	-- (--)
North Central	0.0 (6.0)	-- (--)	-- (--)
South	0.0 (4.9)	-- (--)	-- (--)
West	0.0 (7.1)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.1)	-- (--)	-- (--)
Northeast	0.0 (2.1)	-- (--)	-- (--)
North Central	0.0 (2.2)	-- (--)	-- (--)
South	0.0 (1.9)	-- (--)	-- (--)
West	0.0 (3.1)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 253
ABORTION W/ D&C, ASPIRATION CURETTAGE, OR HYSTEROTOMY
DRG(S): 381

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.6)	-- (--)	-- (--)
Northeast	0.0 (2.9)	-- (--)	-- (--)
North Central	0.0 (3.2)	-- (--)	-- (--)
South	0.0 (2.7)	-- (--)	-- (--)
West	0.0 (4.0)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.5)	-- (--)	-- (--)
Northeast	0.0 (0.8)	-- (--)	-- (--)
North Central	0.1 (1.0)	-- (--)	-- (--)
South	0.0 (0.8)	-- (--)	-- (--)
West	0.0 (1.4)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	+	+	+
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	+	+	+
	=	=	=
% Patients Who Died			

DRG CLUSTER: 254
FALSE LABOR
DRG(S): 382

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.7)	-- (--)	-- (--)
Northeast	0.0 (5.8)	-- (--)	-- (--)
North Central	0.0 (4.5)	-- (--)	-- (--)
South	0.0 (5.0)	-- (--)	-- (--)
West	0.0 (6.7)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.8)	-- (--)	-- (--)
Northeast	0.0 (1.7)	-- (--)	-- (--)
North Central	0.0 (1.5)	-- (--)	-- (--)
South	0.0 (1.5)	-- (--)	-- (--)
West	0.0 (2.2)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 255
OTHER ANTEPARTUM DXS W/ MEDICAL COMPLICATIONS
DRG(S): 383

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (0.6)	-- (--)	-- (--)
Northeast	0.0 (1.2)	-- (--)	-- (--)
North Central	0.0 (1.1)	-- (--)	-- (--)
South	0.0 (1.0)	-- (--)	-- (--)
West	0.0 (1.4)	-- (--)	-- (--)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (0.5)	-- (--)	-- (--)
Northeast	0.0 (0.9)	-- (--)	-- (--)
North Central	0.0 (0.9)	-- (--)	-- (--)
South	0.0 (0.8)	-- (--)	-- (--)
West	0.0 (1.3)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 256
OTHER ANTEPARTUM DXS W/O MEDICAL COMPLICATIONS
DRG(S): 384

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.8)	-- (--)	-- (--)
Northeast	0.0 (4.0)	-- (--)	-- (--)
North Central	0.0 (3.8)	-- (--)	-- (--)
South	0.0 (3.2)	-- (--)	-- (--)
West	0.0 (3.8)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (0.6)	-- ( )	-- (--)
Northeast	0.0 (1.2)	-- (--)	-- (--)
North Central	0.0 (1.2)	-- (--)	-- (--)
South	0.0 (1.2)	-- (--)	-- (--)
West	0.0 (1.6)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 264
SPLENECTOMY
DRG(S): 392, 393

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	3.5 (1.7)	9.4 (5.0)	14.7 (5.7)
Northeast	4.5 (3.6)	24.0 (10.5)	42.8 (16.7)
North Central	2.8 (3.6)	6.6 (9.9)	6.4 (13.6)
South	3.9 (2.9)	8.3 (9.1)	10.7 (8.9)
West	2.6 (3.6)	0.0 (10.3)	14.1 (10.3)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (2.0)	0.0 (8.0)	0.0 (12.2)
Northeast	0.0 (4.7)	** (**)	0.0 (19.5)
North Central	0.0 (4.1)	0.0 (14.2)	** (**)
South	0.0 (3.1)	0.0 (12.2)	0.0 (19.1)
West	0.0 (4.3)	** (**)	-- (--)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 265
OTHER O.R. PROCEDURES OF BLOOD & BLOOD FORMING ORGANS
DRG(S): 394

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	6.0 (2.6)	7.8 (6.2)	3.5 (6.5)	**U.S.**	0.0 (1.7)	0.0 (4.9)	0.0 (9.0)
Northeast	15.6 (5.1)	9.5 (11.9)	0.0 (10.5)	**Northeast**	0.0 (3.0)	0.0 (9.4)	0.0 (12.7)
North Central	0.0 (6.1)	8.3 (11.1)	** (**)	**North Central**	0.0 (3.7)	0.0 (10.6)	** (**)
South	1.6 (3.9)	0.0 (11.8)	6.1 (8.6)	**South**	0.0 (2.9)	0.0 (8.6)	0.0 (17.5)
West	11.2 (7.4)	19.4 (17.0)	-- (--)	**West**	0.0 (4.3)	0.0 (11.3)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷	**No. of Patients Who died** **Total No. Patients**	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				**% Patients Who Died**			

DRG CLUSTER: 266
RED BLOOD CELL DISORDERS
DRG(S): 395, 396

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	2.9 (0.7)	4.8 (1.0)	4.1 (0.8)
Northeast	3.8 (1.4)	6.2 (2.0)	3.5 (1.5)
North Central	2.2 (1.4)	5.3 (2.1)	4.2 (1.6)
South	2.9 (1.2)	4.1 (1.7)	5.0 (1.3)
West	2.0 (2.1)	2.8 (2.8)	3.0 (2.1)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.1 (0.7)	1.7 (1.8)	1.1 (1.3)
Northeast	0.0 (1.6)	0.0 (3.9)	0.0 (2.6)
North Central	0.3 (1.1)	0.0 (3.7)	1.2 (3.0)
South	0.0 (1.1)	4.0 (2.7)	0.5 (2.1)
West	0.0 (2.1)	0.0 (4.5)	6.2 (4.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 267
COAGULATION DISORDERS
DRG(S): 397

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	6.1 (1.7)	11.5 (2.3)	15.4 (2.2)
Northeast	7.5 (3.7)	8.6 (5.7)	20.8 (4.6)
North Central	8.6 (3.4)	16.9 (4.4)	7.0 (4.5)
South	5.2 (2.8)	12.9 (4.2)	22.0 (4.0)
West	3.0 (3.8)	4.8 (4.9)	9.4 (4.8)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.0 (1.5)	0.0 (4.0)	3.4 (4.7)
Northeast	0.0 (3.0)	0.0 (9.1)	0.0 (8.3)
North Central	0.0 (3.0)	0.0 (6.5)	14.3 (9.5)
South	0.0 (2.6)	0.0 (6.9)	0.0 (8.3)
West	0.0 (3.9)	0.0 (11.8)	0.0 (12.9)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 268
RETICULOENDOTHELIAL & IMMUNITY DISORDERS
DRG(S): 398, 399

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	**Age** <65	65-74	75+
U.S.	17.1 (0.8)	9.6 (1.9)	8.2 (2.0)
Northeast	24.6 (1.2)	9.1 (3.8)	10.5 (4.0)
North Central	6.9 (2.1)	8.3 (4.0)	10.8 (4.0)
South	11.8 (1.6)	6.2 (3.3)	0.8 (3.5)
West	10.6 (2.4)	18.7 (4.6)	13.3 (4.2)

Without CCs

Region	**Age** <65	65-74	75+
U.S.	3.1 (1.2)	0.0 (3.8)	1.1 (4.1)
Northeast	0.7 (2.3)	0.0 (8.9)	3.4 (7.1)
North Central	0.0 (2.7)	0.0 (7.8)	0.0 (9.5)
South	6.7 (1.9)	0.0 (5.5)	0.0 (6.7)
West	1.5 (3.3)	0.0 (12.4)	0.0 (11.7)

ACTUAL DEATH RATES

With CCs

	Age <65	65-74	75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	65-74	75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 269
LYMPHOMA & LEUKEMIA W/ MAJOR O.R. PROCEDURES
DRG(S): 400

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
U.S.	17.0 (1.9)	17.8 (2.4)	13.4 (2.9)
Northeast	16.8 (4.0)	12.8 (4.5)	7.1 (5.7)
North Central	17.1 (3.4)	19.4 (5.1)	21.7 (8.0)
South	18.9 (3.5)	11.1 (4.7)	14.5 (5.0)
West	13.9 (4.3)	32.7 (5.5)	14.2 (5.9)

Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	0.9 (1.7)	0.0 (3.4)	3.8 (4.2)
Northeast	1.2 (3.7)	0.0 (7.0)	5.1 (8.7)
North Central	2.4 (3.3)	0.0 (7.0)	5.5 (9.0)
South	0.0 (2.8)	0.0 (5.9)	4.0 (7.0)
West	0.0 (4.3)	0.0 (7.4)	0.0 (9.7)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 270
LYMPHOMA & NON-ACUTE LEUKEMIA W/ OTHER PROCEDURES
DRG(S): 401, 402

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	11.6 (2.1)	11.7 (2.4)	15.2 (2.7)	U.S.	0.0 (1.8)	0.6 (3.0)	0.7 (3.2)
Northeast	12.4 (4.5)	4.4 (4.9)	23.0 (4.5)	Northeast	0.0 (3.4)	0.0 (5.5)	0.0 (5.8)
North Central	6.3 (4.2)	9.6 (4.7)	15.2 (5.7)	North Central	0.0 (3.8)	0.0 (6.4)	2.6 (6.2)
South	13.6 (3.6)	19.4 (4.2)	7.7 (4.8)	South	0.0 (3.1)	0.0 (5.8)	0.0 (6.1)
West	15.2 (5.7)	10.8 (5.6)	12.4 (7.6)	West	0.0 (4.5)	3.4 (7.1)	0.0 (8.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 271
LYMPHOMA & NON-ACUTE LEUKEMIA
DRG(S): 403, 404

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	24.0 (1.1)	26.6 (1.3)	26.7 (1.3)	U.S.	5.6 (1.5)	9.0 (2.4)	11.8 (2.5)
Northeast	29.2 (2.3)	29.6 (2.7)	30.4 (2.6)	Northeast	5.6 (3.5)	7.3 (4.7)	7.2 (4.5)
North Central	22.1 (2.1)	25.2 (2.6)	22.4 (2.6)	North Central	9.1 (2.9)	7.7 (5.4)	15.2 (5.0)
South	20.8 (1.9)	24.3 (2.1)	26.6 (2.2)	South	2.8 (2.3)	9.8 (4.1)	18.5 (4.5)
West	26.6 (2.8)	29.3 (3.1)	28.0 (3.4)	West	7.1 (3.9)	11.8 (6.3)	2.6 (6.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 272
ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURES
DRG(S): 405, 473

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	26.1 (1.6)	40.2 (2.6)	51.2 (2.5)	U.S.	5.3 (2.1)	26.6 (6.6)	31.0 (4.6)
Northeast	34.1 (4.0)	45.4 (5.6)	56.2 (5.7)	Northeast	11.4 (6.3)	0.0 (14.2)	33.8 (9.3)
North Central	21.7 (3.2)	47.5 (5.1)	44.6 (5.4)	North Central	10.0 (5.5)	19.2 (16.9)	38.1 (10.1)
South	23.3 (2.4)	43.6 (5.0)	51.8 (4.3)	South	2.3 (2.7)	39.2 (9.8)	25.9 (8.7)
West	31.4 (3.8)	25.8 (5.0)	52.1 (5.0)	West	9.2 (5.7)	33.3 (15.7)	28.4 (8.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 273
MYELOPROLIF. DIS. OR POORLY DIFF. NEOPLASM W/ MAJOR O.R. PROCEDURES
DRG(S): 406, 407

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	7.6 (2.2)	16.1 (2.9)	24.6 (3.0)
Northeast	9.1 (4.4)	11.4 (5.4)	26.1 (6.3)
North Central	8.6 (3.9)	20.6 (5.5)	25.7 (5.3)
South	8.4 (4.6)	13.2 (5.8)	29.6 (5.5)
West	3.4 (4.7)	20.7 (6.7)	6.9 (8.1)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (2.5)	0.0 (3.9)	0.0 (7.1)
Northeast	0.0 (5.7)	0.0 (10.2)	0.0 (13.1)
North Central	0.0 (5.0)	0.0 (7.1)	0.0 (15.4)
South	0.0 (3.9)	0.0 (6.7)	0.0 (12.5)
West	0.0 (6.0)	0.0 (8.0)	0.0 (16.4)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 274
MYELOPROLIF. DIS. OR POORLY DIFF. NEOPLASM W/ OTHER O.R. PROCEDURES
DRG(S): 408

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	5.1 (1.8)	5.4 (2.0)	12.3 (2.8)
Northeast	6.7 (3.9)	7.7 (4.3)	22.4 (5.7)
North Central	6.1 (3.0)	4.5 (3.6)	14.2 (5.5)
South	5.4 (3.4)	5.4 (3.5)	10.9 (5.1)
West	1.1 (4.1)	3.1 (5.8)	0.0 (6.2)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.3 (1.5)	0.0 (2.3)	0.7 (3.2)
Northeast	0.0 (3.2)	0.0 (4.7)	2.0 (5.4)
North Central	1.2 (3.2)	0.0 (4.9)	0.0 (6.4)
South	0.0 (2.4)	0.0 (3.9)	0.0 (6.8)
West	0.3 (3.9)	0.0 (5.6)	0.0 (7.8)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 275
RADIOTHERAPY
DRG(S): 409

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+	Region	Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
U.S.	6.0 (1.9)	10.1 (2.4)	11.1 (2.7)	U.S.	0.0 (2.8)	0.0 (6.0)	0.0 (8.4)
Northeast	9.6 (3.6)	12.7 (3.9)	11.3 (4.6)	Northeast	0.0 (5.7)	** (**)	0.0 (11.3)
North Central	8.5 (4.3)	13.3 (5.4)	16.4 (5.9)	North Central	0.0 (6.9)	0.0 (12.7)	** (**)
South	3.2 (4.1)	7.4 (4.4)	8.0 (5.2)	South	0.0 (5.5)	0.0 (9.1)	0.0 (19.5)
West	2.6 (3.7)	3.7 (6.6)	8.3 (7.2)	West	0.0 (4.8)	0.0 (11.9)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	With CCs Age 65-74	With CCs Age 75+		Without CCs Age <65	Without CCs Age 65-74	Without CCs Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 276
CHEMOTHERAPY
DRG(S): 410

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.8 (0.4)	0.9 (0.5)	1.1 (0.9)
Northeast	0.9 (0.8)	1.1 (1.1)	1.1 (1.8)
North Central	0.5 (0.6)	0.9 (0.9)	0.8 (1.7)
South	0.9 (0.7)	0.7 (1.1)	1.3 (1.8)
West	0.7 (0.9)	0.7 (1.2)	1.1 (1.8)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (0.6)	0.0 (1.0)	0.0 (1.8)
Northeast	0.0 (1.4)	0.0 (2.2)	0.0 (3.4)
North Central	0.1 (1.1)	0.0 (1.8)	0.0 (3.0)
South	0.0 (1.1)	0.0 (1.9)	0.0 (4.3)
West	0.4 (1.5)	0.0 (2.5)	0.0 (4.3)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 277
HISTORY OF MALIGNANCY W/O ENDOSCOPY
DRG(S): 411

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	65-74	75+	Region	Without CCs Age <65	65-74	75+
U.S.	2.2 (3.3)	0.0 (6.1)	2.2 (5.8)	U.S.	2.5 (5.3)	0.0 (8.8)	38.3 (8.3)
Northeast	0.0 (18.6)	** (**)	18.9 (16.8)	Northeast	0.0 (14.1)	0.0 (18.6)	0.0 (18.3)
North Central	18.4 (16.6)	** (**)	** (**)	North Central	0.0 (10.7)	** (**)	** (**)
South	0.0 (3.5)	0.0 (6.3)	0.0 (6.6)	South	4.4 (7.0)	0.0 (11.2)	61.7 (10.8)
West	** (**)	** (**)	** (**)	West	** (**)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	65-74	75+		Without CCs Age <65	65-74	75+
No. of Patients Who died				No. of Patients Who died			
	÷	÷	÷		÷	÷	÷
Total No. Patients				Total No. Patients			
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 278
HISTORY OF MALIGNANCY W/ ENDOSCOPY
DRG(S): 412

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs		
	Age		
	<65	65-74	75+
U.S.	** (**)	0.0 (10.0)	0.0 (11.4)
Northeast	-- (--)	-- (--)	-- (--)
North Central	-- (--)	-- (--)	** (**)
South	** (**)	0.0 (10.3)	0.0 (12.6)
West	-- (--)	** (**)	** (**)

Region	Without CCs		
	Age		
	<65	65-74	75+
U.S.	0.0 (9.1)	** (**)	0.0 (15.3)
Northeast	0.0 (17.1)	-- (--)	** (**)
North Central	0.0 (16.8)	-- (--)	** (**)
South	0.0 (16.0)	** (**)	-- (--)
West	** (**)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 279
OTHER MYELOPROLIF. DISORDERS OR POORLY DIFF. NEOPLASM DXS
DRG(S): 413, 414

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	40.9 (1.5)	36.4 (1.7)	43.7 (1.9)
Northeast	47.2 (3.3)	46.2 (3.8)	47.7 (3.4)
North Central	38.7 (2.7)	36.2 (3.3)	44.7 (4.0)
South	46.1 (2.7)	32.3 (2.7)	39.6 (3.0)
West	27.5 (3.7)	34.8 (4.7)	45.5 (5.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	27.7 (2.2)	38.3 (3.2)	44.5 (3.5)
Northeast	25.4 (5.8)	30.1 (8.7)	37.7 (6.9)
North Central	16.6 (4.8)	40.2 (9.0)	17.3 (8.4)
South	34.2 (3.0)	45.8 (4.2)	62.5 (4.9)
West	22.4 (5.8)	15.1 (8.2)	10.6 (12.6)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 280
O.R. PROCEDURES FOR INFECTIOUS & PARASITIC DISEASES
DRG(S): 415

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	9.2 (1.2)	18.6 (1.6)	20.8 (1.4)
Northeast	8.1 (2.6)	18.5 (3.4)	22.6 (2.9)
North Central	9.0 (2.4)	21.4 (3.0)	23.7 (2.6)
South	9.9 (2.0)	18.3 (2.7)	16.1 (2.4)
West	9.3 (2.5)	14.5 (3.9)	23.9 (3.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.3)	2.1 (2.9)	0.0 (4.4)
Northeast	0.0 (3.3)	0.0 (7.6)	0.0 (11.5)
North Central	0.0 (2.7)	0.0 (6.6)	0.0 (8.0)
South	0.0 (2.0)	4.3 (4.1)	0.0 (8.1)
West	0.0 (2.6)	0.0 (7.2)	0.0 (9.0)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 281
SEPTICEMIA
DRG(S): 416, 417

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	11.9 (0.7)	17.5 (0.8)	24.9 (0.6)
Northeast	15.1 (1.6)	20.8 (1.8)	30.8 (1.3)
North Central	10.3 (1.4)	18.6 (1.7)	22.6 (1.1)
South	11.8 (1.2)	16.4 (1.4)	24.6 (0.9)
West	10.7 (1.8)	14.4 (2.0)	21.9 (1.6)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.3 (1.2)	5.6 (3.1)	12.1 (2.2)
Northeast	1.2 (3.0)	7.7 ([illegible].3)	10.3 (5.5)
North Central	1.0 (2.4)	4.9 (6.1)	12.3 (3.9)
South	2.0 (1.8)	7.4 (5.3)	12.9 (3.4)
West	0.0 (3.1)	0.0 (7.4)	11.0 (6.4)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 282
POSTOPERATIVE & POST-TRAUMA INFECTIONS
DRG(S): 418

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.1 (1.7)	2.0 (2.6)	8.1 (3.0)
Northeast	1.9 (3.8)	0.0 (5.5)	10.9 (7.0)
North Central	1.0 (3.3)	0.0 (6.1)	11.9 (6.1)
South	0.6 (2.7)	4.2 (4.2)	10.3 (5.5)
West	1.1 (4.1)	1.8 (5.4)	0.0 (5.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.1 (1.1)	0.0 (2.8)	0.0 (3.4)
Northeast	0.0 (2.7)	0.0 (7.5)	0.0 (8.0)
North Central	0.0 (2.1)	0.0 (4.9)	0.0 (5.4)
South	0.4 (1.9)	0.0 (4.8)	0.0 (6.6)
West	0.0 (2.6)	0.0 (6.1)	0.0 (8.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 283
FEVER OF UNKNOWN ORIGIN, AGES 18+
DRG(S): 419, 420

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.1 (1.3)	2.1 (1.8)	6.0 (1.7)	U.S.	0.0 (1.5)	0.0 (2.6)	0.0 (2.7)
Northeast	0.9 (2.8)	3.5 (4.1)	8.5 (3.7)	Northeast	0.0 (3.4)	0.0 (5.5)	0.0 (6.9)
North Central	0.8 (2.9)	1.1 (4.0)	3.6 (3.5)	North Central	0.0 (3.5)	0.0 (6.6)	0.0 (6.2)
South	0.7 (2.0)	2.3 (2.7)	4.7 (2.8)	South	0.0 (2.3)	0.0 (3.9)	0.0 (3.8)
West	2.7 (3.0)	1.3 (4.3)	8.7 (3.9)	West	0.0 (4.0)	0.0 (7.1)	0.0 (7.5)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 284
VIRAL ILLNESS, AGE >17
DRG(S): 421

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
Region	**Age** **<65**	**65-74**	**75+**
U.S.	0.7 (1.1)	4.1 (2.5)	2.3 (2.1)
Northeast	0.8 (2.5)	1.8 (5.1)	4.1 (4.8)
North Central	0.5 (2.3)	0.0 (5.6)	1.6 (4.2)
South	0.5 (1.6)	4.4 (4.4)	2.4 (3.5)
West	1.5 (2.8)	9.8 (5.2)	1.5 (4.7)

	Without CCs		
Region	**Age** **<65**	**65-74**	**75+**
U.S.	0.0 (1.0)	0.0 (3.6)	0.0 (3.8)
Northeast	0.0 (2.2)	0.0 (6.9)	0.0 (6.8)
North Central	0.0 (2.0)	0.0 (6.9)	0.0 (7.1)
South	0.0 (1.5)	0.0 (7.1)	0.0 (7.6)
West	0.0 (2.9)	0.0 (8.3)	0.0 (10.1)

ACTUAL DEATH RATES

	With CCs		
	Age **<65**	**65-74**	**75+**
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age **<65**	**65-74**	**75+**
No. of Patients Who died **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 285
VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN, AGE <18
DRG(S): 422

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.1 (0.9)	-- (--)	-- (--)
Northeast	0.0 (2.2)	-- (--)	-- (--)
North Central	0.0 (1.7)	-- (--)	-- (--)
South	0.3 (1.5)	-- (--)	-- (--)
West	0.0 (2.6)	-- (--)	-- (--)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.7)	-- (--)	-- (--)
Northeast	0.0 (1.4)	-- (--)	-- (--)
North Central	0.0 (1.3)	-- (--)	-- (--)
South	0.0 (1.1)	-- (--)	-- (--)
West	0.0 (1.8)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 286
OTHER INFECTIONS & PARASITIC DISEASE DXS
DRG(S): 423

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	7.1 (1.5)	7.9 (3.2)	10.6 (2.8)	U.S.	0.0 (1.6)	0.0 (6.8)	0.0 (7.2)
Northeast	7.1 (2.7)	14.6 (7.5)	16.3 (7.5)	Northeast	0.0 (3.3)	0.0 (16.9)	0.0 (14.2)
North Central	3.2 (3.7)	13.1 (7.0)	14.3 (5.9)	North Central	0.0 (3.4)	0.0 (14.7)	0.0 (13.6)
South	6.3 (2.6)	1.9 (4.8)	8.3 (3.9)	South	0.0 (2.5)	0.0 (10.9)	0.0 (11.8)
West	12.7 (3.6)	10.3 (7.8)	5.8 (9.3)	West	0.0 (4.3)	0.0 (14.0)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 287
O.R. PROCEDURES W/ PRIN. DX OF MENTAL ILLNESS
DRG(S): 424

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

	With CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.9 (2.3)	14.0 (3.9)	3.8 (3.7)
Northeast	0.0 (6.3)	11.1 (7.2)	8.1 (6.5)
North Central	0.0 (4.3)	5.7 (9.2)	5.1 (7.9)
South	2.0 (3.5)	20.7 (5.9)	0.3 (6.6)
West	0.0 (5.9)	9.3 (11.8)	0.0 (9.5)

	Without CCs		
	Age		
Region	<65	65-74	75+
U.S.	0.0 (1.6)	0.0 (4.8)	0.0 (5.2)
Northeast	0.0 (4.9)	0.0 (11.0)	0.0 (10.5)
North Central	0.0 (2.8)	0.0 (8.4)	0.0 (9.4)
South	0.0 (2.9)	0.0 (7.6)	0.0 (7.9)
West	0.0 (3.3)	0.0 (16.7)	** (**)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 288
ACUTE ADJUST. REACT. & DISTURBANCES OF PSYCHOSOCIAL DYSFUNCTION
DRG(S): 425

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.1 (1.4)	2.7 (2.3)	3.1 (1.9)
Northeast	0.0 (4.1)	0.0 (7.1)	1.7 (5.0)
North Central	0.4 (2.5)	1.6 (4.8)	1.9 (3.6)
South	0.0 (2.0)	3.4 (3.3)	4.8 (3.0)
West	0.0 (3.5)	4.2 (6.2)	1.8 (5.2)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.4 (2.4)	0.0 (2.5)
Northeast	0.0 (2.4)	0.0 (7.6)	0.0 (8.2)
North Central	0.0 (1.5)	1.2 (4.9)	0.0 (4.6)
South	0.0 (1.2)	0.0 (3.3)	0.0 (4.1)
West	0.0 (2.1)	0.7 (6.1)	0.0 (5.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 289
DEPRESSIVE NEUROSES
DRG(S): 426

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.0 (2.6)	0.5 (2.7)
Northeast	0.0 (2.4)	0.0 (8.4)	0.0 (6.8)
North Central	0.2 (1.5)	0.0 (4.7)	0.0 (4.9)
South	0.0 (1.1)	0.0 (3.9)	1.2 (4.2)
West	0.0 (2.4)	0.0 (6.7)	0.0 (7.4)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.5)	0.0 (1.9)	0.0 (2.4)
Northeast	0.0 (1.4)	0.0 (6.0)	0.0 (5.8)
North Central	0.0 (0.9)	0.0 (3.9)	0.0 (4.7)
South	0.0 (0.6)	0.0 (2.5)	0.0 (3.6)
West	0.0 (1.5)	0.0 (6.8)	0.0 (7.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 290
NEUROSES EXCEPT DEPRESSIVE
DRG(S): 427

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.2 (1.4)	2.4 (5.9)	0.0 (7.1)
Northeast	0.0 (3.4)	0.0 (13.8)	0.0 (16.5)
North Central	0.0 (2.4)	0.0 (13.9)	0.0 (11.4)
South	0.4 (2.3)	7.0 (10.2)	0.0 (12.1)
West	0.0 (3.7)	0.0 (10.9)	** (**)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.7)	0.0 (4.5)	0.0 (5.3)
Northeast	0.0 (1.9)	0.0 (13.3)	0.0 (13.6)
North Central	0.0 (1.3)	0.0 (8.8)	0.0 (10.8)
South	0.0 (1.0)	0.0 (6.9)	0.0 (6.4)
West	0.0 (2.1)	0.0 (10.6)	0.0 (12.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 291
DISORDERS OF PERSONALITY & IMPULSE CONTROL
DRG(S): 428

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.2 (1.7)	0.0 (10.1)	19.0 (16.8)	U.S.	0.0 (1.1)	0.0 (10.9)	0.0 (12.2)
Northeast	0.0 (4.9)	** (**)	** (**)	Northeast	0.0 (3.0)	** (**)	** (**)
North Central	0.7 (3.3)	0.0 (16.0)	** (**)	North Central	0.0 (2.1)	0.0 (19.4)	** (**)
South	0.0 (2.5)	** (**)	** (**)	South	0.0 (1.6)	** (**)	0.0 (16.4)
West	0.0 (4.8)	** (**)	-- (--)	West	0.0 (3.5)	** (**)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 292
ORGANIC DISTURBANCES & MENTAL RETARDATION
DRG(S): 429

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs		
	Age		
	<65	65-74	75+
U.S.	1.4 (1.7)	3.2 (1.8)	2.5 (1.1)
Northeast	0.0 (4.3)	1.7 (4.4)	7.2 (2.4)
North Central	1.9 (3.2)	0.0 (3.6)	1.9 (2.2)
South	1.4 (2.6)	6.6 (2.8)	1.1 (1.6)
West	2.2 (5.7)	1.4 (4.6)	1.3 (2.8)

Region	Without CCs		
	Age		
	<65	65-74	75+
U.S.	0.0 (1.5)	0.2 (1.7)	0.9 (1.2)
Northeast	0.0 (3.7)	0.0 (4.3)	0.0 (2.8)
North Central	0.0 (3.0)	0.0 (3.7)	0.0 (2.5)
South	0.0 (2.1)	0.0 (2.4)	2.0 (1.8)
West	0.0 (5.5)	1.7 (5.0)	0.0 (3.3)

ACTUAL DEATH RATES

	With CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

	Without CCs		
	Age		
	<65	65-74	75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

DRG CLUSTER: 293
PSYCHOSES
DRG(S): 430

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.4 (0.5)	2.0 (1.1)	3.3 (1.2)	U.S.	0.0 (0.3)	0.0 (0.8)	0.1 (1.1)
Northeast	0.4 (1.2)	0.3 (2.1)	3.4 (2.0)	Northeast	0.0 (0.6)	0.0 (1.7)	0.0 (2.0)
North Central	0.2 (0.8)	3.0 (2.0)	2.7 (2.4)	North Central	0.0 (0.5)	0.0 (1.6)	0.0 (2.2)
South	0.5 (0.8)	1.9 (1.8)	4.1 (2.0)	South	0.0 (0.4)	0.0 (1.4)	0.4 (1.8)
West	0.4 (1.4)	3.3 (3.1)	2.2 (3.3)	West	0.0 (0.8)	0.0 (2.7)	0.0 (3.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ――― Total No. Patients	÷	÷	÷	No. of Patients Who died ――― Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 294
CHILDHOOD MENTAL DISORDERS
DRG(S): 431

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.3)	-- (--)	-- (--)
Northeast	0.0 (8.3)	-- (--)	-- (--)
North Central	0.0 (4.3)	-- (--)	-- (--)
South	0.0 (3.2)	-- (--)	-- (--)
West	0.0 (5.9)	-- (--)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.0)	-- (--)	-- (--)
Northeast	0.0 (2.9)	-- (--)	-- (--)
North Central	0.0 (2.0)	-- (--)	-- (--)
South	0.0 (1.4)	-- (--)	-- (--)
West	0.0 (3.1)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 295
OTHER DXS OF MENTAL DISORDERS
DRG(S): 432

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.8)	0.0 (15.7)	** (**)
Northeast	0.0 (11.5)	** (**)	** (**)
North Central	0.0 (6.2)	-- (--)	** (**)
South	0.0 (6.8)	0.0 (18.8)	** (**)
West	0.0 (8.6)	** (**)	-- (--)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.0)	0.0 (14.2)	0.0 (15.8)
Northeast	0.0 (9.0)	** (**)	** (**)
North Central	0.0 (3.2)	0.0 (19.3)	** (**)
South	0.0 (3.6)	** (**)	** (**)
West	0.0 (4.0)	** (**)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 296
ALCOHOL/DRUG USE & INDUCED ORGANIC MENTAL DISORDERS, LEFT AMA
DRG(S): 433

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (0.9)	0.0 (4.2)	0.0 (12.6)
Northeast	0.0 (2.3)	0.0 (9.4)	** (**)
North Central	0.0 (1.5)	0.0 (7.5)	** (**)
South	0.0 (1.8)	0.0 (7.2)	** (**)
West	0.0 (2.4)	0.0 (11.3)	** (**)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.9)	0.0 (5.3)	0.0 (10.0)
Northeast	0.0 (2.3)	0.0 (12.5)	** (**)
North Central	0.0 (1.4)	0.0 (10.7)	** (**)
South	0.0 (1.3)	0.0 (8.5)	0.0 (11.8)
West	0.0 (2.8)	0.0 (11.8)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 297
ALC./DRUG ABUSE, INTOX. INDUCED MEN. SYN. EXCEPT DEP., OTHER SYM. TREAT.
DRG(S): 434

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.6 (1.1)	3.6 (2.6)	1.6 (2.8)	U.S.	0.0 (0.8)	0.0 (3.7)	0.0 (4.0)
Northeast	1.4 (3.0)	7.1 (6.8)	3.2 (6.9)	Northeast	0.0 (2.9)	0.0 (11.6)	0.0 (11.3)
North Central	0.3 (2.1)	8.3 (5.3)	4.7 (5.9)	North Central	0.0 (1.5)	0.0 (7.8)	0.0 (8.3)
South	0.0 (1.8)	1.1 (4.1)	0.0 (4.4)	South	0.1 (1.1)	0.0 (5.0)	0.0 (6.1)
West	1.8 (3.0)	0.0 (6.1)	0.0 (6.4)	West	0.0 (2.4)	0.0 (9.7)	0.0 (8.8)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 298
ALCOHOL/DRUG DEPENDENCE, DETOX. &/OR OTHER SYMPTOMATIC TREATMENT
DRG(S): 435

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.5 (0.5)	1.5 (1.6)	0.6 (2.8)
Northeast	0.5 (1.1)	4.7 (3.7)	0.0 (6.2)
North Central	0.4 (0.7)	0.7 (3.2)	2.3 (5.6)
South	0.9 (0.9)	0.9 (2.7)	0.0 (4.4)
West	0.1 (1.1)	0.7 (3.1)	0.0 (7.0)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.5)	0.0 (2.5)	0.0 (5.0)
Northeast	0.0 (1.1)	0.0 (5.9)	0.0 (9.3)
North Central	0.0 (0.7)	0.0 (4.7)	0.0 (8.6)
South	0.0 (0.9)	0.0 (4.0)	0.0 (10.5)
West	0.0 (1.5)	0.0 (6.2)	0.0 (12.9)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 299
ALCOHOL/DRUG DEPENDENCE W/ REHAB. THERAPY
DRG(S): 436

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.0 (1.0)	0.0 (3.4)	0.0 (12.5)
Northeast	0.0 (2.0)	0.0 (9.9)	** (**)
North Central	0.0 (1.5)	0.0 (4.8)	** (**)
South	0.0 (3.0)	0.0 (7.0)	** (**)
West	0.0 (2.6)	0.0 (8.4)	** (**)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.0 (4.8)	0.0 (12.4)
Northeast	0.0 (2.0)	** (**)	** (**)
North Central	0.0 (1.2)	0.0 (9.2)	** (**)
South	0.0 (1.6)	0.0 (9.7)	** (**)
West	0.0 (2.1)	0.0 (7.1)	0.0 (17.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 300
ALCOHOL/DRUG DEPENDENCE, COMBINED REHAB. & DETOX. THERAPY
DRG(S): 437

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.8)	0.6 (2.4)	0.0 (4.3)	U.S.	0.0 (0.7)	0.0 (3.5)	0.0 (7.1)
Northeast	0.0 (2.0)	0.0 (7.4)	0.0 (13.3)	Northeast	0.0 (2.2)	0.0 (10.1)	** (**)
North Central	0.0 (1.2)	0.0 (3.4)	0.0 (7.5)	North Central	0.0 (1.2)	0.0 (7.0)	0.0 (12.6)
South	0.0 (1.6)	2.3 (4.6)	0.0 (7.4)	South	0.0 (1.1)	0.0 (5.7)	0.0 (10.9)
West	0.0 (1.7)	0.0 (5.9)	0.0 (9.3)	West	0.0 (1.7)	0.0 (7.1)	0.0 (16.6)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 302
SKIN GRAFTS FOR INJURIES
DRG(S): 439

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

	With CCs				Without CCs		
	Age				Age		
Region	<65	65-74	75+	**Region**	<65	65-74	75+
U.S.	2.5 (5.5)	9.8 (7.2)	0.0 (9.8)	**U.S.**	0.0 (2.4)	0.0 (6.2)	0.0 (8.0)
Northeast	9.8 (10.9)	0.0 (14.5)	** (**)	**Northeast**	0.0 (5.6)	0.0 (20.0)	0.0 (18.3)
North Central	0.0 (9.9)	0.0 (15.9)	0.0 (17.7)	**North Central**	0.0 (4.9)	0.0 (13.7)	** (**)
South	0.0 (9.7)	31.8 (12.9)	0.0 (16.2)	**South**	0.0 (3.6)	0.0 (8.9)	0.0 (10.4)
West	0.0 (17.2)	0.0 (14.6)	** (**)	**West**	0.0 (6.6)	0.0 (14.1)	0.0 (19.6)

ACTUAL DEATH RATES

	With CCs				Without CCs		
	Age				Age		
	<65	65-74	75+		<65	65-74	75+
No. of Patients Who died				**No. of Patients Who died**			
	÷	÷	÷		÷	÷	÷
Total No. Patients				**Total No. Patients**			
	=	=	=		=	=	=
% Patients Who Died				**% Patients Who Died**			

DRG CLUSTER: 303
WOUND DEBRIDEMENTS FOR INJURIES
DRG(S): 440

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	2.7 (1.7)	13.4 (3.2)	4.2 (3.3)	U.S.	0.0 (1.0)	0.0 (4.0)	0.0 (4.4)
Northeast	2.5 (4.1)	23.1 (7.2)	11.9 (6.6)	Northeast	0.0 (2.5)	0.0 (9.1)	0.0 (12.7)
North Central	3.8 (3.1)	2.5 (5.7)	0.0 (6.1)	North Central	0.0 (1.8)	0.0 (6.2)	0.0 (7.4)
South	3.4 (2.8)	21.4 (5.2)	3.9 (6.1)	South	0.0 (1.7)	0.0 (8.3)	0.0 (8.1)
West	0.0 (3.8)	0.0 (9.4)	0.0 (8.6)	West	0.0 (2.6)	0.0 (9.6)	0.0 (9.3)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 304
HAND PROCEDURES FOR INJURIES
DRG(S): 441

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.8)	0.0 (18.8)	0.0 (15.2)
Northeast	0.0 (11.8)	** (**)	** (**)
North Central	0.0 (8.9)	** (**)	** (**)
South	0.0 (8.0)	-- (--)	** (**)
West	0.0 (11.8)	** (**)	** (**)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.4)	0.0 (4.5)	0.0 (7.6)
Northeast	0.0 (3.4)	0.0 (10.7)	** (**)
North Central	0.0 (2.5)	0.0 (10.5)	0.0 (19.0)
South	0.0 (2.4)	0.0 (8.5)	0.0 (11.3)
West	0.0 (3.1)	0.0 (7.7)	0.0 (14.3)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 305
OTHER O.R. PROCEDURES FOR INJURIES
DRG(S): 442, 443

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	2.6 (0.7)	4.3 (1.1)	5.7 (1.3)	U.S.	0.0 (0.7)	0.5 (1.5)	0.2 (1.8)
Northeast	1.8 (1.6)	4.1 (2.5)	4.9 (2.5)	Northeast	0.0 (1.5)	0.0 (3.4)	0.0 (3.7)
North Central	2.8 (1.6)	2.0 (2.5)	3.8 (2.7)	North Central	0.0 (1.3)	0.0 (2.9)	0.8 (3.1)
South	3.4 (1.3)	6.3 (2.0)	7.3 (2.4)	South	0.1 (1.1)	1.8 (2.7)	0.0 (3.6)
West	2.1 (1.5)	3.9 (2.2)	6.5 (2.9)	West	0.0 (1.5)	0.0 (3.4)	0.0 (4.2)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷	No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 306
MULTIPLE TRAUMA
DRG(S): 444, 445, 446

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (1.4)	0.0 (4.1)	5.4 (3.1)
Northeast	0.0 (3.2)	0.0 (12.5)	11.1 (6.3)
North Central	0.0 (2.8)	0.0 (9.9)	4.8 (6.4)
South	0.0 (2.2)	0.0 (6.0)	4.8 (5.3)
West	0.0 (3.7)	0.0 (7.9)	0.0 (7.3)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (0.9)	0.0 (4.1)	1.2 (3.9)
Northeast	0.0 (1.9)	0.0 (8.9)	0.0 (9.1)
North Central	0.0 (1.8)	0.0 (7.6)	5.2 (8.0)
South	0.2 (1.4)	0.0 (7.0)	0.0 (6.4)
West	0.0 (2.4)	0.0 (10.8)	0.0 (8.1)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / **Total No. Patients**	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 307
ALLERGIC REACTIONS
DRG(S): 447, 448

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	<65	65-74	75+
		Age	
U.S.	2.7 (3.1)	1.5 (4.8)	0.0 (5.6)
Northeast	0.0 (6.9)	0.0 (9.5)	0.0 (12.0)
North Central	0.0 (5.4)	4.5 (8.2)	0.0 (10.2)
South	0.0 (5.7)	0.0 (8.3)	0.0 (9.2)
West	0.0 (7.5)	0.0 (17.3)	0.0 (16.2)

Without CCs

Region	<65	65-74	75+
		Age	
U.S.	0.0 (1.6)	0.0 (4.7)	0.0 (5.4)
Northeast	0.0 (3.5)	0.0 (12.4)	0.0 (11.9)
North Central	0.0 (3.0)	0.0 (10.6)	0.0 (9.4)
South	0.0 (2.6)	0.0 (7.0)	0.0 (8.5)
West	0.0 (4.4)	0.0 (10.1)	** (**)

ACTUAL DEATH RATES

With CCs

	<65	65-74	75+
		Age	
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	<65	65-74	75+
		Age	
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 308
POISONING & TOXIC EFFECTS OF DRUGS
DRG(S): 449, 450, 451

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	1.6 (0.6)	3.8 (1.4)	2.8 (1.2)
Northeast	2.2 (1.3)	5.9 (3.0)	2.6 (2.7)
North Central	1.6 (1.1)	3.0 (2.8)	1.0 (2.6)
South	1.1 (1.0)	3.5 (2.4)	4.2 (2.0)
West	2.0 (1.4)	2.8 (3.7)	2.2 (2.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.1 (0.4)	0.0 (2.1)	0.0 (2.1)
Northeast	0.1 (0.9)	0.0 (4.6)	0.0 (4.3)
North Central	0.2 (0.8)	0.0 (4.1)	0.0 (4.1)
South	0.1 (0.6)	0.0 (3.7)	0.0 (3.4)
West	0.0 (1.0)	0.0 (5.1)	0.0 (5.5)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 309
COMPLICATIONS OF TREATMENT
DRG(S): 452, 453

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.9 (0.9)	2.0 (1.5)	3.8 (1.6)
Northeast	3.3 (2.1)	1.7 (3.3)	6.4 (3.3)
North Central	1.3 (1.9)	1.6 (3.0)	4.4 (3.0)
South	0.7 (1.5)	2.4 (2.8)	1.5 (2.8)
West	3.3 (2.2)	2.5 (3.2)	3.6 (3.6)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (0.9)	0.0 (1.8)	0.0 (2.0)
Northeast	0.0 (2.0)	0.0 (3.7)	0.0 (4.1)
North Central	0.0 (1.7)	0.0 (3.5)	0.0 (3.6)
South	0.0 (1.4)	0.0 (3.1)	0.0 (3.7)
West	0.0 (2.0)	0.0 (4.5)	0.0 (4.9)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 310
OTHER INJURIES, POISONINGS & TOXIC EFF. DXS
DRG(S): 454, 455

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED

(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	4.8 (1.8)	3.0 (3.3)	9.5 (2.6)	U.S.	0.6 (1.4)	0.0 (6.2)	0.0 (4.5)
Northeast	8.4 (4.3)	0.0 (7.2)	21.4 (7.6)	Northeast	0.0 (3.2)	0.0 (17.9)	0.0 (9.9)
North Central	6.0 (3.8)	4.1 (7.9)	7.8 (5.4)	North Central	0.0 (2.9)	** (**)	0.0 (9.7)
South	3.7 (2.9)	1.5 (4.7)	9.4 (3.8)	South	0.7 (2.1)	0.0 (7.9)	0.0 (6.4)
West	1.1 (4.1)	12.9 (9.4)	3.5 (6.5)	West	1.9 (3.2)	0.0 (13.6)	0.0 (19.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 312
EXTENSIVE BURNS W/O O.R. PROCEDURES
DRG(S): 457

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	30.1 (11.2)	** (**)	** (**)
Northeast	26.0 (12.3)	-- (--)	** (**)
North Central	-- (--)	-- (--)	-- (--)
South	** (**)	** (**)	** (**)
West	** (**)	-- (--)	-- (--)

Region	Without CCs Age <65	 65-74	 75+
U.S.	8.1 (9.5)	** (**)	-- (--)
Northeast	0.0 (17.0)	** (**)	-- (--)
North Central	20.1 (14.9)	-- (--)	-- (--)
South	0.0 (17.6)	-- (--)	-- (--)
West	-- (--)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 313
NON-EXTENSIVE BURNS W/ SKIN GRAFTS
DRG(S): 458

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.1 (2.7)	0.0 (6.7)	15.7 (6.5)
Northeast	1.2 (3.7)	0.0 (18.6)	27.7 (9.5)
North Central	2.4 (7.1)	0.0 (14.2)	14.4 (14.6)
South	0.0 (5.5)	0.0 (8.8)	0.0 (15.7)
West	1.7 (9.6)	** (**)	0.0 (16.1)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.7)	5.0 (8.6)	0.0 (8.6)
Northeast	0.0 (3.1)	0.0 (20.0)	** (**)
North Central	0.0 (3.2)	0.0 (14.1)	0.0 (16.5)
South	0.0 (2.9)	20.1 (17.3)	0.0 (14.6)
West	0.0 (5.2)	0.0 (19.3)	0.0 (18.1)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 314
NON-EXTENSIVE BURNS W/ WOUND DEBRIDEMENT OR OTHER O.R. PROCEDURES
DRG(S): 459

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (4.7)	0.0 (9.1)	30.8 (8.8)
Northeast	0.0 (7.4)	0.0 (13.9)	56.2 (17.1)
North Central	0.0 (9.2)	0.0 (17.6)	** (**)
South	0.0 (10.1)	** (**)	16.2 (15.5)
West	0.0 (12.6)	** (**)	41.2 (17.0)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (2.2)	** (**)	0.0 (10.7)
Northeast	0.0 (4.4)	-- (--)	-- (--)
North Central	0.0 (4.0)	-- (--)	** (**)
South	0.0 (3.6)	** (**)	0.0 (12.2)
West	0.0 (6.3)	-- (--)	-- (--)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 315
NON-EXTENSIVE BURNS W/O O.R. PROCEDURES
DRG(S): 460

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	1.8 (2.2)	1.9 (5.3)	5.1 (4.7)
Northeast	3.0 (3.7)	0.0 (9.4)	0.0 (10.3)
North Central	0.0 (5.4)	0.0 (11.5)	0.0 (12.6)
South	2.1 (3.9)	0.0 (8.2)	9.9 (6.5)
West	0.0 (6.2)	** (**)	0.0 (12.7)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.0)	0.0 (5.1)	0.0 (6.9)
Northeast	0.0 (2.1)	0.0 (10.7)	0.0 (11.7)
North Central	0.0 (2.1)	0.0 (11.7)	** (**)
South	0.0 (1.6)	0.0 (7.9)	0.0 (9.6)
West	0.0 (3.5)	0.0 (12.8)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 316
O.R. PROCEDURES W/ DXS OF OTHER CONTACT W/ HEALTH SERVICES
DRG(S): 461

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+	Region	Without CCs Age <65	 65-74	 75+
U.S.	1.4 (2.1)	5.7 (2.7)	4.5 (3.2)	U.S.	0.1 (1.2)	1.2 (2.9)	1.1 (3.0)
Northeast	0.0 (4.3)	5.5 (5.1)	8.4 (5.4)	Northeast	0.0 (2.6)	0.0 (6.2)	0.0 (6.4)
North Central	1.4 (3.4)	2.2 (5.7)	0.0 (5.9)	North Central	0.3 (2.1)	3.6 (5.2)	0.0 (5.9)
South	4.6 (4.8)	12.9 (5.5)	5.1 (7.3)	South	0.0 (2.2)	0.0 (6.7)	4.9 (6.3)
West	0.0 (4.5)	1.9 (5.4)	3.6 (7.3)	West	0.0 (2.7)	0.0 (5.8)	0.0 (5.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+		Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷	No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=		=	=	=
% Patients Who Died				% Patients Who Died			

DRG CLUSTER: 317
REHABILITATION
DRG(S): 462

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	0.6 (1.2)	1.4 (1.2)	2.5 (1.0)
Northeast	0.0 (3.7)	0.2 (3.4)	1.1 (2.9)
North Central	0.8 (1.8)	2.1 (1.9)	5.5 (1.6)
South	0.8 (2.4)	1.5 (2.3)	0.6 (2.0)
West	0.4 (2.4)	0.8 (2.6)	0.3 (2.1)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.6)	0.2 (1.8)	0.2 (1.5)
Northeast	0.0 (3.7)	0.0 (5.1)	0.0 (4.6)
North Central	0.0 (3.0)	0.0 (3.1)	0.5 (2.6)
South	0.0 (3.0)	0.0 (3.4)	0.0 (2.8)
West	0.0 (3.2)	0.8 (3.5)	0.0 (3.0)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ――― Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ――― Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 318
SIGNS & SYMPTOMS
DRG(S): 463, 464

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	3.6 (1.7)	3.0 (2.4)	7.1 (2.0)
Northeast	7.1 (3.8)	4.2 (4.9)	3.8 (5.0)
North Central	3.9 (3.4)	5.4 (5.2)	10.8 (3.8)
South	1.9 (2.6)	0.0 (3.9)	7.6 (3.0)
West	3.2 (4.9)	5.2 (6.2)	1.8 (5.2)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.2 (1.7)	0.0 (3.1)	2.7 (3.1)
Northeast	0.0 (4.2)	0.0 (7.9)	3.5 (7.9)
North Central	0.0 (3.4)	0.0 (6.1)	2.8 (5.7)
South	0.4 (2.4)	0.0 (4.5)	1.9 (4.9)
West	0.0 (4.9)	0.0 (9.4)	3.7 (7.5)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 319
AFTERCARE W/ HIST. OF MALIGNANCY AS SECONDARY DX
DRG(S): 465

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	4.4 (8.1)	16.2 (9.0)	11.1 (7.4)
Northeast	0.0 (15.5)	0.0 (16.0)	0.0 (16.8)
North Central	** (**)	** (**)	0.0 (15.5)
South	** (**)	23.0 (13.1)	0.0 (13.2)
West	7.8 (10.8)	** (**)	41.9 (14.4)

Region	Without CCs Age <65	 65-74	 75+
U.S.	2.0 (5.4)	0.0 (8.0)	0.0 (8.5)
Northeast	0.0 (9.9)	0.0 (12.3)	0.0 (16.3)
North Central	** (**)	0.0 (17.3)	0.0 (14.9)
South	3.4 (7.2)	0.0 (14.4)	0.0 (13.7)
West	** (**)	** (**)	** (**)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died ——— Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 320
AFTERCARE W/O HIST. OF MALIGNANCY AS SECONDARY DX
DRG(S): 466

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	3.5 (2.5)	13.1 (3.8)	11.9 (3.7)
Northeast	2.8 (6.5)	8.3 (7.4)	0.0 (9.0)
North Central	0.0 (6.1)	0.0 (11.9)	0.0 (9.5)
South	2.3 (4.2)	11.4 (6.5)	15.1 (5.4)
West	7.2 (4.6)	24.3 (7.1)	22.3 (7.9)

Region	Without CCs Age <65	 65-74	 75+
U.S.	0.0 (1.5)	0.9 (3.5)	1.0 (3.9)
Northeast	0.0 (3.4)	0.0 (8.4)	0.0 (8.7)
North Central	0.0 (4.5)	0.0 (8.8)	0.0 (7.5)
South	0.0 (2.2)	0.0 (5.0)	0.0 (6.1)
West	0.0 (3.6)	5.2 (8.7)	7.9 (10.7)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 325
BILATERAL OR MULTIPLE MAJOR JOINT PROCEDURES OF LOWER EXTREM.
DRG(S): 471

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

With CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.9)	4.6 (3.4)	7.2 (3.5)
Northeast	0.0 (13.8)	0.0 (8.5)	11.0 (10.0)
North Central	0.0 (5.8)	3.4 (4.2)	5.4 (4.6)
South	0.0 (6.7)	15.5 (8.4)	15.4 (8.3)
West	0.0 (11.6)	0.0 (14.0)	0.0 (9.9)

Without CCs

Region	Age <65	Age 65-74	Age 75+
U.S.	0.0 (3.6)	0.0 (3.7)	0.0 (4.1)
Northeast	0.0 (10.9)	0.0 (12.6)	0.0 (10.0)
North Central	0.0 (4.3)	0.0 (4.4)	0.0 (5.5)
South	0.0 (9.1)	0.0 (9.8)	0.0 (8.2)
West	** (**)	0.0 (19.6)	** (**)

ACTUAL DEATH RATES

With CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

Without CCs

	Age <65	Age 65-74	Age 75+
No. of Patients Who died / Total No. Patients	÷	÷	÷
	=	=	=
% Patients Who Died			

DRG CLUSTER: 326
EXTENSIVE BURNS W/ O.R. PROCEDURES
DRG(S): 472

RISK-ADJUSTED EXPECTED DEATH RATES

% DIED
(% ERROR)

Region	With CCs Age <65	 65-74	 75+
U.S.	38.1 (4.8)	** (**)	100.0 (19.6)
Northeast	31.8 (6.7)	** (**)	** (**)
North Central	31.3 (11.3)	-- (--)	** (**)
South	51.5 (9.0)	** (**)	-- (--)
West	** (**)	-- (--)	** (**)

Region	Without CCs Age <65	 65-74	 75+
U.S.	7.3 (9.2)	-- (--)	40.6 (15.4)
Northeast	18.1 (14.5)	-- (--)	** (**)
North Central	0.0 (15.8)	-- (--)	-- (--)
South	0.0 (18.5)	-- (--)	0.0 (20.0)
West	-- (--)	-- (--)	-- (--)

ACTUAL DEATH RATES

	With CCs Age <65	 65-74	 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

	Without CCs Age <65	 65-74	 75+
No. of Patients Who died			
	÷	÷	÷
Total No. Patients			
	=	=	=
% Patients Who Died			

APPENDICES

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Appendix 1

CALCULATION OF PROGRAM INTENSITY INDEX

The Program Intensity Index (Ip) of Phillip and Hai (1976) is used to place hospitals in one of three levels of teaching status. The formula is presented below.

$$Ip = 9.9\,(JCA) + 14.0\,(CP) + 28.0\,(RES) + 14.7\,(MS) + 13.3\,(PNS) + 20.1\,(COT)$$

JCA: Accreditation by the Joint Commission on Accreditation of Healthcare Organizations

CP: Cancer Program approved by the American College of Surgeons

RES: Residency approved by the American Medical Association

MS: Medical School Affiliation reported by the American Medical Association

PNS: Hospital-controlled professional nursing school, reported by the National League for Nursing

COT: Member of Council of Teaching Hospitals of the Association of American Medical Colleges

The numerical values in the formula are weights that have been assigned to each of the approvals incorporated in the index.

In the two million patient sample, the following cut-offs are used to stratify hospitals by teaching status.

Ip value under 25.0	Nonteaching Institution
Ip value 25.0-74.9	Minor Teaching Institution
Ip value 75.0+	Major Teaching Institution

Appendix 2

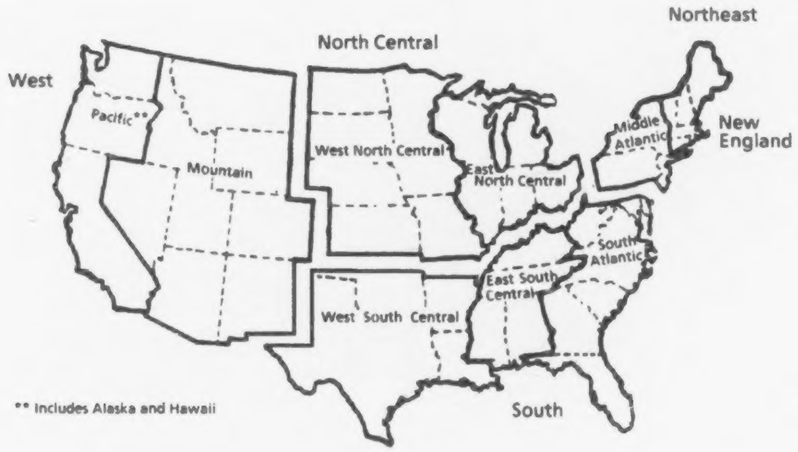
STATE INCLUSIONS BY REGION

Northeast
Connecticut
Maine
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

North Central
Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

South
Alabama
Arkansas
Delaware
District of Columbia
Florida
Georgia
Kentucky
Louisiana
Maryland
Mississippi
North Carolina
Oklahoma
South Carolina
Tennessee
Texas
Virginia
West Virginia

West
Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming


Northeast
North Central
West
Pacific**
Mountain
West North Central
East North Central
Middle Atlantic
New England
South Atlantic
East South Central
West South Central
South
** Includes Alaska and Hawaii

Appendix 3

HOSPTIAL UNIVERSE STRATIFICATION MATRIX

CENSUS DIVISION	TEACHING STATUS	HOSPITAL OWNERSHIP																			
		Gov., Nonfed., In Large Cities					Gov., Nonfed., Not In Large Cities					Nongov., Not-for-Profit					Nongov., For-Profit				
		BEDSIZE					BEDSIZE					BEDSIZE					BEDSIZE				
		6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +	6-99	100-199	200-399	400-499	500 +
NEW ENGLAND	NON																				
	MINOR																				
	MAJOR																				
MIDDLE ATLANTIC	NON																				
	MINOR																				
	MAJOR																				
EAST NORTH CENTRAL	NON																				
	MINOR																				
	MAJOR																				
WEST NORTH CENTRAL	NON																				
	MINOR																				
	MAJOR																				
SOUTH ATLANTIC	NON																				
	MINOR																				
	MAJOR																				
EAST SOUTH CENTRAL	NON																				
	MINOR																				
	MAJOR																				
WEST SOUTH CENTRAL	NON																				
	MINOR																				
	MAJOR																				
MOUNTAIN	NON																				
	MINOR																				
	MAJOR																				
PACIFIC	NON																				
	MINOR																				
	MAJOR																				

Appendix 4

DRG CLUSTER GROUPINGS

DRG Cluster	English Description	DRGs
1	Craniotomy, Age >17 Except for Trauma	1
2	Craniotomy for Trauma Age >17	2
3	Craniotomy Age <18	3
4	Spinal Procedures	4
5	Extracranial Vascular Procedures	5
6	Carpal Tunnel Release	6
7	Peripheral & Cranial Nerve & Other Nerve System Procedures	7, 8
8	Spinal Disorders & Injuries	9
9	Nervous System Neoplasms	10, 11
10	Degenerative Nervous System Disorders	12
11	Multiple Sclerosis and Cerebellar Ataxia	13
12	Cerebrovascular Disorders Except TIA	14
13	Transient Ischemic Attacks	15
14	Nonspecific Cerebrovascular Disorders	16, 17
15	Cranial & Peripheral Nerve Disorders	18, 19
16	Nervous System Infection Except Viral Meningitis	20
17	Viral Meningitis	21
18	Hypertensive Encephalopathy	22
19	Nontraumatic Stupor & Coma	23
20	Seizure and Headache	24, 25, 26
21	Traumatic Stupor & Coma, Coma >1 Hour	27
22	Traumatic Stupor & Coma, Coma <1 Hour	28, 29, 30
23	Concussion	31, 32, 33
24	Other Disorders of Nervous System	34, 35
25	Retinal Procedures	36
26	Orbital Procedures	37
27	Primary Iris Procedures	38
28	Lens Procedures w/ or w/o Vitrectomy	39
29	Extraocular Procedures Except Orbit	40, 41
30	Intraocular Procedures Except Retina, Iris & Lens	42
31	Hyphema	43
32	Acute Major Eye Infections	44
33	Neurological Eye Disorders	45
34	Other Disorders of Eye	46, 47, 48
35	Major Head & Neck Procedures	49
36	Sialoadenectomy	50
37	Salivary Gland Procedures Except Sialoadenectomy	51
38	Cleft Lip & Palate Repair	52
39	Sinus & Mastoid Procedures	53, 54
40	Miscellaneous Ear, Nose & Throat Procedures	55
41	Rhinoplasty	56
42	T&A Proc. Except Tonsillectomy & Adenoidectomy	57, 58
43	Tonsillectomy & Adenoidectomy Procedures	59, 60
44	Myringotomy w/ Tube Insertion	61, 62
45	Other Ear, Nose, & Throat O.R. Procedures	63
46	Ear, Nose, & Throat Malignancy	64
47	Dysequilbrium	65
48	Epistaxis	66
49	Epiglottitis	67
50	Otitis Media & URI	68, 69, 70

DRG CLUSTER GROUPINGS (Continued)

DRG Cluster	English Description	DRGs
51	Laryngotracheitis	71
52	Nasal Trauma & Deformity	72
53	Other Ear, Nose, & Throat Diagnoses	73, 74
54	Major Chest Procedures	75
55	Other Respiratory System O.R. Procedures	76, 77
56	Pulmonary Embolism	78
57	Resp. Infections & Inflammations	79, 80, 81
58	Respiratory Neoplasms	82
59	Major Chest Trauma	83, 84
60	Pleural Effusion	85, 86
61	Pulmonary Edema & Respiratory Failure	87
62	Chronic Obstructive Pulmonary Disease	88
63	Simple Pneumonia & Pleurisy	89, 90, 91
64	Interstitial Lung Disease	92, 93
65	Pneumothorax	94, 95
66	Bronchitis & Asthma	96, 97, 98
67	Respiratory Signs & Symptoms	99, 100
68	Other Respiratory System Dxs	101, 102
69	Heart Transplant	103
70	Cardiac Valve Procedures w/ Pump & w/ Cardiac Cath.	104
71	Cardiac Valve Procedures w/ Pump & w/o Cardiac Cath.	105
72	Coronary Bypass w/ Cardiac Cath.	106
73	Coronary Bypass w/o Cardiac Cath.	107
74	Other Cardiothoracic or Vascular Procedures w/ Pump	108
75	Other Cardiothoracic Procedures w/o Pump	109
76	Major Reconstructive Vascular Procedures w/o Pump	110, 111
77	Vascular Procedures Except Major Reconstruction w/o Pump	112
78	Amputation for Circ System Disorders Except Upper Limb & Toe	113
79	Upper Limb & Toe Amputation for Circ System Disorders	114
80	Perm Cardiac Pacemaker Implant w/ AMI, Heart Failure or Shock	115
81	Perm Cardiac Pacemaker Implant w/o AMI, Heart Failure or Shock	116
82	Cardiac Pacemaker Replace & Revis Except Pulse Generator Replacement	117
83	Cardiac Pacemaker Pulse Generator Replacement	118
84	Vein Ligation & Stripping	119
85	Other Circulatory System O.R. Procedures	120
86	Circulatory Disorders w/ AMI	121, 122, 123
87	Circulatory Disorders Except AMI, w/ Cardiac Cath. w/ Complex Dxs	124
88	Circulatory Disorders Except AMI, w/ Cardiac Cath. w/o Complex Dxs	125
89	Acute & Subacute Endocarditis	126
90	Heart Failure & Shock	127
91	Deep Vein Thrombophlebitis	128
92	Cardiac Arrest, Unexplained	129
93	Peripheral Vascular Disorders	130, 131
94	Atherosclerosis	132, 133
95	Hypertension	134
96	Cardiac Congenital & Valvular Disorders	135, 136, 137
97	Cardiac Arrhythmia & Conduction Disorders	138, 139
98	Angina Pectoris	140
99	Syncope & Collapse	141, 142
100	Chest Pain	143
101	Other Circulatory System Dxs	144, 145
102	Rectal Resection	146, 147
103	Major Small & Large Bowel Procedures	148, 149
104	Peritoneal Adhesiolysis	150, 151

DRG CLUSTER GROUPINGS (Continued)

DRG Cluster	English Description	DRGs
105	Minor Small & Large Bowel Procedures	152, 153
106	Stomach, Esophageal, & Duodenal Procedures	154, 155, 156
107	Anal & Stomach Procedures	157, 158
108	Hernia Procedures Except Inguinal & Femoral, Ages 18+	159, 160
109	Inguinal & Femoral Hernia Procedures, Ages 18+	161, 162
110	Hernia Procedures, Ages 0-17	163
111	Appendectomy w/ Complicated Prin. Dx	164, 165
112	Appendectomy w/o Complicated Prin. Dx	166, 167
113	Mouth Procedures	168, 169
114	Other Digestive System O.R. Procedures	170, 171
115	Digestive Malignancy	172, 173
116	G.I. Hemorrhage	174, 175
117	Complicated Peptic Ulcer	176
118	Uncomplicated Peptic Ulcer	177, 178
119	Inflammatory Bowel Disease	179
120	G.I. Obstruction	180, 181
121	Esophagitis, Gastroent. & Misc. Digestive Disorders	182, 183, 184
122	Dental & Oral Disorders Except Extractions & Restorations	185, 186
123	Dental Extractions & Restorations	187
124	Other Digestive System Dxs	188, 189, 190
125	Major Pancreas, Liver, & Shunt Procedures	191
126	Minor Pancreas, Liver, & Shunt Procedures	192
127	Biliary Tract Procedures Except Total Cholecystectomy	193, 194
128	Total Cholecystectomy w/ C.D.E.	195, 196
129	Total Cholecystectomy w/o C.D.E.	197, 198
130	Hepatobiliary Diagnostic Procedure for Malignancy	199
131	Hepatobiliary Diagnostic Procedure for Non-Malignancy	200
132	Other Hepatobiliary or Pancreas O.R. Procedures	201
133	Cirrhosis & Alcoholic Hepatitis	202
134	Malignancy of Hepatobiliary System or Pancreas	203
135	Disorders of Pancreas Except Malignancy	204
136	Disorders of Liver Except Malignancy, Cirrhosis, Alcoholic Hepatitis	205, 206
137	Disorders of Biliary Tract	207, 208
138	Major Joint and Limb Attachment Procedures	209
139	Hip & Femur Procedures Except Major Joint	210, 211, 212
140	Amputations for Musculoskeletal System & Conn. Tissue Disorders	213
141	Back & Neck Procedures	214, 215
142	Biopsies of Musculoskeletal System & Connective Tissue	216
143	Wound Debridement & Skin Graft Except Hand, for Musculoskeletal & Conn. Tissue Dis.	217
144	Lower Extrem. & Humer Procedures Except Hip, Foot, Femur	218, 219, 220
145	Knee Procedures	221, 222
146	Major Shoulder/Elbow Procedures or Other Upper Extremity Procedures w/ CCs	223
147	Shoulder, Elbow, or Forearm Procedures Except Major Joint Procedures w/o CCs	224
148	Foot Procedures	225
149	Soft Tissue Procedures	226, 227
150	Major Thumb or Joint Procedures, or Other Hand or Wrist Procedures w/ CCs	228
151	Hand or Wrist Procedures Except Major Joint Procedures w/o CCs	229
152	Local Excision & Removal of Int. Fix. Devices of Hip & Femur	230
153	Local Excision & Removal of Int. Fix. Devices Except Hip & Femur	231
154	Arthroscopy	232

DRG CLUSTER GROUPINGS (Continued)

DRG Cluster	English Description	DRGs
155	Other Musculoskeletal System & Conn. Tiss. O.R. Procedures	233, 234
156	Fractures of Femur	235
157	Fractures of Hip & Pelvis	236
158	Sprains, Strains, & Dislocations of Hip, Pelvis, & Thigh	237
159	Osteomyelitis	238
160	Path Fractures & Musculoskeletal & Conn. Tissue Malignancy	239
161	Connective Tissue Disorders	240, 241
162	Septic Arthritis	242
163	Medical Back Problems	243
164	Bone Diseases & Specific Arthropathies	244, 245
165	Non-Specific Arthropathies	246
166	Signs & Symptoms of Musculoskeletal System & Conn. Tissue	247
167	Tendonitis, Myositis, & Bursitis	248
168	Aftercare, Musculoskeletal System & Connective Tissue	249
169	Fx. Sprns., Strns., & Disl. of Forearm, Hand, Foot	250, 251, 252
170	Fx. Sprns., Strns., & Disl. of Up Arm, Low Leg, Except Foot	253, 254, 255
171	Other Dxs of Musculoskeletal System & Conn. Tiss.	256
172	Total Mastectomy for Malignancy	257, 258
173	Subtotal Mastectomy for Malignancy	259, 260
174	Breast Procedures for Non-Malig. Except Biopsy & Loc. Excision	261
175	Breast Biopsy & Loc. Excision for Non-Malignancy	262
176	Skin Grafts &/or Debridement for Skin Ulcer or Cellulitis	263, 264
177	Skin Graft &/or Debridement Except for Skin Ulcer or Cellulitis	265, 266
178	Perianal & Pilonidal Procedures	267
179	Skin, Subcutaneous Tiss. & Breast Plastic Procedures	268
180	Other Skin, Subcut. Tiss. & Breast O.R. Procedures	269, 270
181	Skin Ulcers	271
182	Major Skin Disorders	272, 273
183	Malignant Breast Disorders	274, 275
184	Non-Malignant Breast Disorders	276
185	Cellulitis	277, 278, 279
186	Trauma to Skin, Subcut. Tiss. & Breast	280, 281, 282
187	Minor Skin Disorders	283, 284
188	Amputation of Lower Limb for Endocrine, Nutritional & Metabolic Disorders	285
189	Adrenal & Pituitary Procedures	286
190	Skin Grafts & Wound Debridement, Endoc., Nutrit., & Meta. Disorders	287
191	O.R. Procedures for Obesity	288
192	Parathyroid Procedures	289
193	Thyroid Procedures	290
194	Thyroglossal Procedures	291
195	Other Endocrine, Nutrit., & Meta. O.R. Procedure	292, 293
196	Diabetes	294, 295
197	Nutritional & Misc. Metabolic Disorders	296, 297, 298
198	Inborn Errors of Metabolism	299
199	Endocrine Disorders	300, 301
200	Kidney Transplant	302
201	Kidney, Ureter, & Major Bladder Procedures for Neoplasm	303
202	Kidney, Ureter, & Major Bladder Procedures for Non-Neoplasm	304, 305
203	Prostatectomy	306, 307
204	Minor Bladder Procedures	308, 309
205	Transurethral Procedures	310, 311
206	Urethral Procedures	312, 313, 314
207	Other Kidney & Urinary Tract O.R. Procedures	315
208	Renal Failure	316

DRG CLUSTER GROUPINGS (Continued)

DRG Cluster	English Description	DRGs
209	Admit for Renal Dialysis	317
210	Kidney & Urinary Tract Neoplasms	318, 319
211	Kidney & Urinary Tract Infections	320, 321, 322
212	Urinary Stones, &/or ESW Lithotripsy	323, 324
213	Kidney & Urinary Tract Signs & Symptoms	325, 326, 327
214	Urethral Stricture	328, 329, 330
215	Other Kidney & Urinary Tract Dxs	331, 332, 333
216	Major Male Pelvic Procedures	334, 335
217	Transurethral Prostatectomy	336, 337
218	Testes Procedures for Malignancy	338
219	Testes Procedures for Non-Malignancy	339, 340
220	Penis Procedures	341
221	Circumcision	342, 343
222	Other Male Repro. System O.R. Procedures for Malignancy	344
223	Other Male Repro. System O.R. Procedures Except for Malignancy	345
224	Malignancy, Male Repro. System	346, 347
225	Benign Prostatic Hypertrophy	348, 349
226	Inflammation of Male Repro. System	350
227	Sterilization, Male	351
228	Other Male Repro. System Dxs	352
229	Pelvis Evisceration, Radical Hysterectomy & Radical Vulvectomy	353
230	Uterine & Adnexa Procedures for Non-Ovarian/Adnexal Malignancy	354, 355
231	Female Repro. System for Reconstructive Procedures	356
232	Uterine & Adnexa Procedures for Ovarian or Adnexal Malignancy	357
233	Uterine & Adnexa Procedures for Non-Malignancy	358, 359
234	Vagina, Cervix, & Vulva Procedures	360
235	Laparoscopy & Incisional Tubal Interruption	361
236	Endoscopic Tubal Interruption	362
237	D&C, Conization & Radio-Implant for Malignancy	363
238	D&C, Conization Except for Malignancy	364
239	Other Female Repro. System O.R. Procedures	365
240	Malignancy, Female Repro. System	366, 367
241	Infections, Female Repro. System	368
242	Menstrual & Other Female Repro. System Disorders	369
243	Cesarean Section	370, 371
244	Vaginal Delivery w/ Complicating Dxs	372
245	Vaginal Delivery w/o Complicating Dxs	373
246	Vaginal Delivery w/ Sterilization &/or D&C	374
247	Vaginal Delivery w/o O.R. Procedures Except Steril. &/or D&C	375
248	Postpartum & Postabortion Dxs w/o O.R. Procedures	376
249	Postpartum & Postabortion Dxs w/ O.R. Procedures	377
250	Ectopic Pregnancy	378
251	Threatened Abortion	379
252	Abortion w/o D&C	380
253	Abortion w/ D&C, Aspiration Curettage, or Hysterotomy	381
254	False Labor	382
255	Other Antepartum Dxs w/ Medical Complications	383
256	Other Antepartum Dxs w/o Medical Complications	384
257	Neonates, Died or Transferred to Another Acute Care Facility	385
258	Extreme Immaturity or Resp. Distress Syndrome, Neonate	386
259	Prematurity w/ Major Problems	387
260	Prematurity w/o Major Problems	388
261	Full Term Neonate w/ Major Problems	389
262	Neonates w/ Other Significant Problems	390

DRG CLUSTER GROUPINGS (Continued)

DRG Cluster	English Description	DRGs
263	Normal Newborns	391
264	Splenectomy	392, 393
265	Other O.R. Procedures of Blood & Blood Forming Organs	394
266	Red Blood Cell Disorders	395, 396
267	Coagulation Disorders	397
268	Retriculoendothelial & Immunity Disorders	398, 399
269	Lymphoma & Leukemia w/ Major O.R. Procedures	400
270	Lymphoma & Non-Acute Leukemia w/ Other Procedures	401, 402
271	Lymphoma & Non-Acute Leukemia	403, 404
272	Acute Leukemia w/o Major O.R. Procedures	405, 473
273	Myeloprolif. Disorders or Poorly Diff. Neoplasm w/ Major O.R. Procedures	406, 407
274	Myeloprolif. Disorders or Poorly Diff. Neoplasm w/ Other O.R. Procedures	408
275	Radiotherapy	409
276	Chemotherapy	410
277	History of Malignancy w/o Endoscopy	411
278	History of Malignancy w/ Endoscopy	412
279	Other Myeloprolif. Disorders or Poorly Diff. Neoplasm Dxs	413, 414
280	O.R. Procedures for Infectious & Parasitic Diseases	415
281	Septicemia	416, 417
282	Postoperative & Post-Trauma Infections	418
283	Fever of Unknown Origin, Ages 18+	419, 420
284	Viral Illness, Age >17	421
285	Viral Illness & Fever of Unknown Origin, Age <18	422
286	Other Infections & Parasitic Disease Dxs	423
287	O.R. Procedures w/ Prin. Dx of Mental Illness	424
288	Acute Adjust. React. & Disturbances of Psychosocial Dysfunction	425
289	Depressive Neuroses	426
290	Neuroses Except Depressive	427
291	Disorders of Personality & Impulse control	428
292	Organic Disturbances & Mental Retardation	429
293	Psychoses	430
294	Childhood Mental Disorders	431
295	Other Dxs of Mental Disorders	432
296	Alcohol/Drug Use & Induced Organic Mental Disorders, Left AMA	433
297	Alcohol/Drug Abuse, Intox. Induced Mental Syn. Except Depend. &/or Other Symptomatic Treatment	434
298	Alcohol/Drug Dependence, Detox. &/or Other Symptomatic Treatment	435
299	Alcohol/Drug Dependence w/ Rehab. Therapy	436
300	Alcohol/Drug Dependence, Combined Rehab. & Detox. Therapy	437
301	No Longer Valid	438
302	Skin Grafts for Injuries	439
303	Wound Debridements for Injuries	440
304	Hand Procedures for Injuries	441
305	Other O.R. Procedures for Injuries	442, 443
306	Multiple Trauma	444, 445, 446
307	Allergic Reactions	447, 448
308	Poisoning & Toxic Effects of Drugs	449, 450, 451
309	Complications of Treatment	452, 453
310	Other Injuries, Poisonings, & Toxic Eff Dxs	454, 455
311	Burns, Transferred to Another Acute Care Facility	456
312	Extensive Burns w/o O.R. Procedures	457
313	Non-Extensive Burns w/ Skin Grafts	458
314	Non-Extensive Burns w/ Wound Debridement or Other O.R. Procedures	459
315	Non-Extensive Burns w/o O.R. Procedures	460

DRG CLUSTER GROUPINGS (Continued)

DRG Cluster	English Description	DRGs
316	O.R. Procedures w/ Dxs of Other Contact w/ Health Services	461
317	Rehabilitation	462
318	Signs & Symptoms	463, 464
319	Aftercare w/ Hist. of Malignancy as Secondary Dx	465
320	Aftercare w/o Hist. of Malignancy as Secondary Dx	466
321	Other Factors Influencing Health Status	467
322	Unrelated O.R. Procedures	468
323	Prin. Dx Invalid as Discharge Dx	469
324	Ungroupable	470
325	Bilateral or Multiple Major Joint Procedures of Lower Extrem.	471
326	Extensive Burns w/ O.R. Procedures	472

Appendix 5

HEALTH CARE FINANCING ADMINISTRATION (HCFA) DEFINED COMPLICATIONS AND COMORBIDITIES

This list consists of *ICD-9-CM* diagnosis codes which represent substantial complications and comorbidities when present as secondary diagnoses, as defined by HCFA.

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HCFA DEFINED COMPLICATIONS AND COMORBIDITIES (Continued)

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HCFA DEFINED COMPLICATIONS AND COMORBIDITIES (Continued)

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HCFA DEFINED COMPLICATIONS AND COMORBIDITIES (Continued)

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HCFA DEFINED COMPLICATIONS AND COMORBIDITIES (Continued)

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HCFA DEFINED COMPLICATIONS AND COMORBIDITIES (Continued)

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HCFA DEFINED COMPLICATIONS AND COMORBIDITIES (Continued)

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Appendix 6

ERROR RANGE TABLES

PERCENT				PATIENT NUMBER				
DIED	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**
1%	13.35	9.44	7.71	6.67	5.97	5.45	5.05	4.72
2%	18.78	13.28	10.84	9.39	8.40	7.67	7.10	6.64
3%	22.89	16.18	13.21	11.44	10.24	9.34	8.65	8.09
4%	26.29	18.59	15.18	13.15	11.76	10.73	9.94	9.30
5%	29.24	20.68	16.88	14.62	13.08	11.94	11.05	10.34
6%	31.86	22.53	18.40	15.93	14.25	13.01	12.04	11.26
7%	34.23	24.21	19.76	17.12	15.31	13.97	12.94	12.10
8%	36.40	25.74	21.01	18.20	16.28	14.86	13.76	12.87
9%	38.40	27.15	22.17	19.20	17.17	15.67	14.51	13.57
10%	40.25	28.46	23.24	20.12	18.00	16.43	15.21	14.23
11%	41.98	29.68	24.24	20.99	18.77	17.14	15.87	14.84
12%	43.60	30.83	25.17	21.80	19.50	17.80	16.48	15.41
13%	45.12	31.90	26.05	22.56	20.18	18.42	17.05	15.95
14%	46.55	32.92	26.88	23.28	20.82	19.01	17.60	16.46
15%	47.91	33.87	27.66	23.95	21.42	19.56	18.11	16.94
16%	49.19	34.78	28.40	24.59	22.00	20.08	18.59	17.39
17%	50.40	35.64	29.10	25.20	22.54	20.57	19.05	17.82
18%	51.54	36.45	29.76	25.77	23.05	21.04	19.48	18.22
19%	52.63	37.22	30.39	26.32	23.54	21.49	19.89	18.61
20%	53.67	37.95	30.98	26.83	24.00	21.91	20.28	18.97
21%	54.65	38.64	31.55	27.32	24.44	22.31	20.65	19.32
22%	55.58	39.30	32.09	27.79	24.85	22.69	21.01	19.65
23%	56.46	39.92	32.60	28.23	25.25	23.05	21.34	19.96
24%	57.30	40.52	33.08	28.65	25.62	23.39	21.66	20.26
25%	58.09	41.08	33.54	29.05	25.98	23.72	21.96	20.54
26%	58.85	41.61	33.98	29.42	26.32	24.02	22.24	20.81
27%	59.56	42.12	34.39	29.78	26.64	24.32	22.51	21.06
28%	60.24	42.60	34.78	30.12	26.94	24.59	22.77	21.30
29%	60.88	43.05	35.15	30.44	27.23	24.85	23.01	21.52
30%	61.48	43.47	35.50	30.74	27.50	25.10	23.24	21.74
31%	62.05	43.88	35.82	31.02	27.75	25.33	23.45	21.94
32%	62.58	44.25	36.13	31.29	27.99	25.55	23.65	22.13
33%	63.09	44.61	36.42	31.54	28.21	25.75	23.84	22.30
34%	63.55	44.94	36.69	31.78	28.42	25.95	24.02	22.47
35%	63.99	45.25	36.95	32.00	28.62	26.12	24.19	22.62
36%	64.40	45.54	37.18	32.20	28.80	26.29	24.34	22.77
37%	64.77	45.80	37.40	32.39	28.97	26.44	24.48	22.90
38%	65.12	46.05	37.60	32.56	29.12	26.59	24.61	23.02
39%	65.44	46.27	37.78	32.72	29.26	26.72	24.73	23.14
40%	65.73	46.48	37.95	32.86	29.39	26.83	24.84	23.24
41%	65.99	46.66	38.10	32.99	29.51	26.94	24.94	23.33
42%	66.22	46.82	38.23	33.11	29.61	27.03	25.03	23.41
43%	66.42	46.97	38.35	33.21	29.70	27.12	25.10	23.48
44%	66.60	47.09	38.45	33.30	29.78	27.19	25.17	23.55
45%	66.75	47.20	38.54	33.37	29.85	27.25	25.23	23.60
46%	66.87	47.28	38.61	33.43	29.90	27.30	25.27	23.64
47%	66.96	47.35	38.66	33.48	29.95	27.34	25.31	23.67
48%	67.03	47.40	38.70	33.51	29.98	27.36	25.33	23.70
49%	67.07	47.42	38.72	33.53	29.99	27.38	25.35	23.71
50%	67.08	47.43	38.73	33.54	30.00	27.39	25.35	23.72

ERROR RANGE TABLES (Continued)

PERCENT	PATIENT NUMBER							
DIED	45	50	55	60	65	70	75	80
1%	4.45	4.22	4.02	3.85	3.70	3.57	3.45	3.34
2%	6.26	5.94	5.66	5.42	5.21	5.02	4.85	4.70
3%	7.63	7.24	6.90	6.61	6.35	6.12	5.91	5.72
4%	8.76	8.31	7.93	7.59	7.29	7.03	6.79	6.57
5%	9.75	9.25	8.82	8.44	8.11	7.81	7.55	7.31
6%	10.62	10.08	9.61	9.20	8.84	8.52	8.23	7.97
7%	11.41	10.82	10.32	9.88	9.49	9.15	8.84	8.56
8%	12.13	11.51	10.97	10.51	10.09	9.73	9.40	9.10
9%	12.80	12.14	11.58	11.08	10.65	10.26	9.91	9.60
10%	13.42	12.73	12.14	11.62	11.16	10.76	10.39	10.06
11%	13.99	13.27	12.66	12.12	11.64	11.22	10.84	10.49
12%	14.53	13.79	13.15	12.59	12.09	11.65	11.26	10.90
13%	15.04	14.27	13.60	13.02	12.51	12.06	11.65	11.28
14%	15.52	14.72	14.04	13.44	12.91	12.44	12.02	11.64
15%	15.97	15.15	14.44	13.83	13.29	12.80	12.37	11.98
16%	16.40	15.55	14.83	14.20	13.64	13.15	12.70	12.30
17%	16.80	15.94	15.20	14.55	13.98	13.47	13.01	12.60
18%	17.18	16.30	15.54	14.88	14.30	13.78	13.31	12.89
19%	17.54	16.64	15.87	15.19	14.60	14.07	13.59	13.16
20%	17.89	16.97	16.18	15.49	14.88	14.34	13.86	13.42
21%	18.22	17.28	16.48	15.77	15.16	14.60	14.11	13.66
22%	18.53	17.57	16.76	16.04	15.41	14.85	14.35	13.89
23%	18.82	17.85	17.02	16.30	15.66	15.09	14.58	14.12
24%	19.10	18.12	17.28	16.54	15.89	15.31	14.79	14.32
25%	19.36	18.37	17.52	16.77	16.11	15.53	15.00	14.52
26%	19.62	18.61	17.74	16.99	16.32	15.73	15.19	14.71
27%	19.85	18.84	17.96	17.19	16.52	15.92	15.38	14.89
28%	20.08	19.05	18.16	17.39	16.71	16.10	15.55	15.06
29%	20.29	19.25	18.36	17.57	16.88	16.27	15.72	15.22
30%	20.49	19.44	18.54	17.75	17.05	16.43	15.87	15.37
31%	20.68	19.62	18.71	17.91	17.21	16.58	16.02	15.51
32%	20.86	19.79	18.87	18.07	17.36	16.73	16.16	15.65
33%	21.03	19.95	19.02	18.21	17.50	16.86	16.29	15.77
34%	21.18	20.10	19.16	18.35	17.63	16.99	16.41	15.89
35%	21.33	20.24	19.29	18.47	17.75	17.10	16.52	16.00
36%	21.47	20.36	19.42	18.59	17.86	17.21	16.63	16.10
37%	21.59	20.48	19.53	18.70	17.97	17.31	16.72	16.19
38%	21.71	20.59	19.63	18.80	18.06	17.40	16.81	16.28
39%	21.81	20.69	19.73	18.89	18.15	17.49	16.90	16.36
40%	21.91	20.78	19.82	18.97	18.23	17.57	16.97	16.43
41%	22.00	20.87	19.90	19.05	18.30	17.64	17.04	16.50
42%	22.07	20.94	19.97	19.12	18.37	17.70	17.10	16.55
43%	22.14	21.00	20.03	19.17	18.42	17.75	17.15	16.61
44%	22.20	21.06	20.08	19.22	18.47	17.80	17.20	16.65
45%	22.25	21.11	20.12	19.27	18.51	17.84	17.23	16.69
46%	22.29	21.15	20.16	19.30	18.55	17.87	17.26	16.72
47%	22.32	21.17	20.19	19.33	18.57	17.90	17.29	16.74
48%	22.34	21.20	20.21	19.35	18.59	17.91	17.31	16.76
49%	22.36	21.21	20.22	19.36	18.60	17.92	17.32	16.77
50%	22.36	21.21	20.23	19.36	18.61	17.93	17.32	16.77

ERROR RANGE TABLES (Continued)

PERCENT	PATIENT NUMBER							
DIED	85	90	95	100	105	110	115	120
1%	3.24	3.15	3.06	2.98	2.91	2.85	2.78	2.72
2%	4.56	4.43	4.31	4.20	4.10	4.00	3.92	3.83
3%	5.55	5.39	5.25	5.12	4.99	4.88	4.77	4.67
4%	6.38	6.20	6.03	5.88	5.74	5.61	5.48	5.37
5%	7.09	6.89	6.71	6.54	6.38	6.23	6.10	5.97
6%	7.73	7.51	7.31	7.12	6.95	6.79	6.64	6.50
7%	8.30	8.07	7.85	7.65	7.47	7.30	7.14	6.99
8%	8.83	8.58	8.35	8.14	7.94	7.76	7.59	7.43
9%	9.31	9.05	8.81	8.59	8.38	8.19	8.01	7.84
10%	9.76	9.49	9.23	9.00	8.78	8.58	8.39	8.22
11%	10.18	9.89	9.63	9.39	9.16	8.95	8.75	8.57
12%	10.57	10.28	10.00	9.75	9.51	9.30	9.09	8.90
13%	10.94	10.63	10.35	10.09	9.85	9.62	9.41	9.21
14%	11.29	10.97	10.68	10.41	10.16	9.93	9.71	9.50
15%	11.62	11.29	10.99	10.71	10.45	10.21	9.99	9.78
16%	11.93	11.59	11.28	11.00	10.73	10.49	10.26	10.04
17%	12.22	11.88	11.56	11.27	11.00	10.74	10.51	10.29
18%	12.50	12.15	11.83	11.53	11.25	10.99	10.75	10.52
19%	12.77	12.41	12.07	11.77	11.49	11.22	10.97	10.74
20%	13.02	12.65	12.31	12.00	11.71	11.44	11.19	10.95
21%	13.25	12.88	12.54	12.22	11.92	11.65	11.39	11.15
22%	13.48	13.10	12.75	12.43	12.13	11.85	11.59	11.34
23%	13.69	13.31	12.95	12.62	12.32	12.04	11.77	11.52
24%	13.90	13.51	13.15	12.81	12.50	12.22	11.95	11.70
25%	14.09	13.69	13.33	12.99	12.68	12.39	12.11	11.86
26%	14.27	13.87	13.50	13.16	12.84	12.55	12.27	12.01
27%	14.45	14.04	13.66	13.32	13.00	12.70	12.42	12.16
28%	14.61	14.20	13.82	13.47	13.15	12.84	12.56	12.30
29%	14.77	14.35	13.97	13.61	13.28	12.98	12.69	12.43
30%	14.91	14.49	14.10	13.75	13.42	13.11	12.82	12.55
31%	15.05	14.63	14.24	13.87	13.54	13.23	12.94	12.67
32%	15.18	14.75	14.36	13.99	13.66	13.34	13.05	12.77
33%	15.30	14.87	14.47	14.11	13.77	13.45	13.15	12.88
34%	15.41	14.98	14.58	14.21	13.87	13.55	13.25	12.97
35%	15.52	15.08	14.68	14.31	13.96	13.64	13.34	13.06
36%	15.62	15.18	14.77	14.40	14.05	13.73	13.43	13.15
37%	15.71	15.27	14.86	14.48	14.14	13.81	13.51	13.22
38%	15.79	15.35	14.94	14.56	14.21	13.88	13.58	13.29
39%	15.87	15.42	15.01	14.63	14.28	13.95	13.64	13.36
40%	15.94	15.49	15.08	14.70	14.34	14.01	13.70	13.42
41%	16.00	15.55	15.14	14.75	14.40	14.07	13.76	13.47
42%	16.06	15.61	15.19	14.81	14.45	14.12	13.81	13.52
43%	16.11	15.66	15.24	14.85	14.49	14.16	13.85	13.56
44%	16.15	15.70	15.28	14.89	14.53	14.20	13.89	13.59
45%	16.19	15.73	15.31	14.92	14.57	14.23	13.92	13.62
46%	16.22	15.76	15.34	14.95	14.59	14.26	13.94	13.65
47%	16.24	15.78	15.36	14.97	14.61	14.28	13.96	13.67
48%	16.26	15.80	15.38	14.99	14.63	14.29	13.98	13.68
49%	16.27	15.81	15.39	15.00	14.64	14.30	13.98	13.69
50%	16.27	15.81	15.39	15.00	14.64	14.30	13.99	13.69

ERROR RANGE TABLES (Continued)

PERCENT DIED	PATIENT NUMBER 150	175	200	225	250	275	300	325
1%	2.44	2.26	2.11	1.99	1.89	1.80	1.72	1.66
2%	3.43	3.17	2.97	2.80	2.66	2.53	2.42	2.33
3%	4.18	3.87	3.62	3.41	3.24	3.09	2.95	2.84
4%	4.80	4.44	4.16	3.92	3.72	3.55	3.39	3.26
5%	5.34	4.94	4.62	4.36	4.14	3.94	3.77	3.63
6%	5.82	5.39	5.04	4.75	4.51	4.30	4.11	3.95
7%	6.25	5.79	5.41	5.10	4.84	4.62	4.42	4.25
8%	6.65	6.15	5.75	5.43	5.15	4.91	4.70	4.51
9%	7.01	6.49	6.07	5.72	5.43	5.18	4.96	4.76
10%	7.35	6.80	6.36	6.00	5.69	5.43	5.20	4.99
11%	7.66	7.10	6.64	6.26	5.94	5.66	5.42	5.21
12%	7.96	7.37	6.89	6.50	6.17	5.88	5.63	5.41
13%	8.24	7.63	7.13	6.73	6.38	6.08	5.82	5.60
14%	8.50	7.87	7.36	6.94	6.58	6.28	6.01	5.77
15%	8.75	8.10	7.57	7.14	6.77	6.46	6.18	5.94
16%	8.98	8.31	7.78	7.33	6.96	6.63	6.35	6.10
17%	9.20	8.52	7.97	7.51	7.13	6.80	6.51	6.25
18%	9.41	8.71	8.15	7.68	7.29	6.95	6.65	6.39
19%	9.61	8.90	8.32	7.85	7.44	7.10	6.79	6.53
20%	9.80	9.07	8.49	8.00	7.59	7.24	6.93	6.66
21%	9.98	9.24	8.64	8.15	7.73	7.37	7.05	6.78
22%	10.15	9.39	8.79	8.28	7.86	7.49	7.17	6.89
23%	10.31	9.54	8.93	8.42	7.98	7.61	7.29	7.00
24%	10.46	9.69	9.06	8.54	8.10	7.73	7.40	7.11
25%	10.61	9.82	9.19	8.66	8.22	7.83	7.50	7.21
26%	10.74	9.95	9.30	8.77	8.32	7.94	7.60	7.30
27%	10.87	10.07	9.42	8.88	8.42	8.03	7.69	7.39
28%	11.00	10.18	9.52	8.89	8.52	8.12	7.78	7.47
29%	11.11	10.29	9.63	9.08	8.61	8.21	7.86	7.55
30%	11.22	10.39	9.72	9.17	8.69	8.29	7.94	7.63
31%	11.33	10.49	9.81	9.25	8.78	8.37	8.01	7.70
32%	1.43	10.58	9.90	9.33	8.85	8.44	8.08	7.76
33%	11.52	10.66	9.97	9.40	8.92	8.51	8.14	7.82
34%	11.60	10.74	10.05	9.47	8.99	8.57	8.20	7.88
35%	11.68	10.82	10.12	9.54	9.05	8.63	8.26	7.94
36%	11.76	10.89	10.18	9.60	9.11	8.68	8.31	7.99
37%	11.83	10.95	10.24	9.66	9.16	8.73	8.36	8.03
38%	11.89	11.01	10.30	9.71	9.21	8.78	8.41	8.08
39%	11.95	11.06	10.35	9.75	9.25	8.82	8.45	8.12
40%	12.00	11.11	10.39	9.80	9.30	8.86	8.49	8.15
41%	12.05	11.15	10.43	9.84	9.33	8.90	8.52	8.18
42%	12.09	11.19	10.47	9.87	9.36	8.93	8.55	8.21
43%	12.13	11.23	10.50	9.90	9.39	8.96	8.57	8.24
44%	12.16	11.26	10.53	9.93	9.42	8.98	8.60	8.26
45%	12.19	11.28	10.55	9.95	9.44	9.00	8.62	8.28
46%	12.21	11.30	10.57	9.97	9.46	9.02	8.63	8.29
47%	12.23	11.32	10.59	9.98	9.47	9.03	8.64	8.31
48%	12.24	11.33	10.60	9.99	9.48	9.04	8.65	8.31
49%	12.24	11.34	10.60	10.00	9.48	9.04	8.66	8.32
50%	12.25	11.34	10.61	10.00	9.49	9.05	8.66	8.32

ERROR RANGE TABLES (Continued)

PERCENT	PATIENT NUMBER							
DIED	350	375	400	425	500	600	700	800
1%	1.60	1.54	1.49	1.45	1.33	1.22	1.13	1.06
2%	2.24	2.17	2.10	2.04	1.88	1.71	1.59	1.48
3%	2.74	2.64	2.56	2.48	2.29	2.09	1.93	1.81
4%	3.14	3.04	2.94	2.85	2.63	2.40	2.22	2.08
5%	3.49	3.38	3.27	3.17	2.92	2.67	2.47	2.31
6%	3.81	3.68	3.56	3.46	3.19	2.91	2.69	2.52
7%	4.09	3.95	3.83	3.71	3.42	3.12	2.89	2.71
8%	4.35	4.20	4.07	3.95	3.64	3.32	3.08	2.88
9%	4.59	4.43	4.29	4.16	3.84	3.50	3.24	3.04
10%	4.81	4.65	4.50	4.37	4.02	3.67	3.40	3.18
11%	5.02	4.85	4.69	4.55	4.20	3.83	3.55	3.32
12%	5.21	5.03	4.87	4.73	4.36	3.98	3.68	3.45
13%	5.39	5.21	5.04	4.89	4.51	4.12	3.81	3.57
14%	5.56	5.38	5.20	5.05	4.66	4.25	3.93	3.68
15%	5.73	5.53	5.36	5.20	4.79	4.37	4.05	3.79
16%	5.88	5.68	5.50	5.33	4.92	4.49	4.16	3.89
17%	6.02	5.82	5.63	5.47	5.04	4.60	4.26	3.98
18%	6.16	5.95	5.76	5.59	5.15	4.71	4.36	4.07
19%	6.29	6.08	5.88	5.71	5.26	4.80	4.45	4.16
20%	6.41	6.20	6.00	5.82	5.37	4.90	4.54	4.24
21%	6.53	6.31	6.11	5.93	5.46	4.99	4.62	4.32
22%	6.64	6.42	6.21	6.03	5.56	5.07	4.70	4.39
23%	6.75	6.52	6.31	6.12	5.65	5.15	4.77	4.46
24%	6.85	6.62	6.41	6.21	5.73	5.23	4.84	4.53
25%	6.94	6.71	6.50	6.30	5.81	5.30	4.91	4.59
26%	7.03	6.80	6.58	6.38	5.88	5.37	4.97	4.65
27%	7.12	6.88	6.66	6.46	5.96	5.44	5.03	4.71
28%	7.20	6.96	6.73	6.53	6.02	5.50	5.09	4.76
29%	7.28	7.03	6.81	6.60	6.09	5.56	5.15	4.81
30%	7.35	7.10	6.87	6.67	6.15	5.61	5.20	4.86
31%	7.42	7.16	6.94	6.73	6.20	5.66	5.24	4.91
32%	7.48	7.23	7.00	6.79	6.26	5.71	5.29	4.95
33%	7.54	7.28	7.05	6.84	6.31	5.76	5.33	4.99
34%	7.60	7.34	7.11	6.89	6.36	5.80	5.37	5.02
35%	7.65	7.39	7.15	6.94	6.40	5.84	5.41	5.06
36%	7.70	7.44	7.20	6.99	6.44	5.88	5.44	5.09
37%	7.74	7.48	7.24	7.03	6.48	5.91	5.47	5.12
38%	7.78	7.52	7.28	7.06	6.51	5.94	5.50	5.15
39%	7.82	7.56	7.32	7.10	6.54	5.97	5.53	5.17
40%	7.86	7.59	7.35	7.13	6.57	6.00	5.55	5.20
41%	7.89	7.62	7.38	7.16	6.60	6.02	5.58	5.22
42%	7.91	7.65	7.40	7.18	6.62	6.04	5.60	5.23
43%	7.94	7.67	7.43	7.20	6.64	6.06	5.61	5.25
44%	7.96	7.69	7.45	7.22	6.66	6.08	5.63	5.26
45%	7.98	7.71	7.46	7.24	6.67	6.09	5.64	5.28
46%	7.99	7.72	7.48	7.25	6.69	6.10	5.65	5.29
47%	8.00	7.73	7.49	7.26	6.70	6.11	5.66	5.29
48%	8.01	7.74	7.49	7.27	6.70	6.12	5.66	5.30
49%	8.02	7.74	7.50	7.27	6.71	6.12	5.67	5.30
50%	8.02	7.75	7.50	7.28	6.71	6.12	5.67	5.30

ERROR RANGE TABLES (Continued)

PERCENT	PATIENT NUMBER							
DIED	**900**	**1000**	**1100**	**1200**	**1300**	**1400**	**1500**	**1600**
1%	0.99	0.94	0.90	0.86	0.83	0.80	0.77	0.75
2%	1.40	1.33	1.27	1.21	1.16	1.12	1.08	1.05
3%	1.71	1.62	1.54	1.48	1.42	1.37	1.32	1.28
4%	1.96	1.86	1.77	1.70	1.63	1.57	1.52	1.47
5%	2.18	2.07	1.97	1.89	1.81	1.75	1.69	1.63
6%	2.37	2.25	2.15	2.06	1.98	1.90	1.84	1.78
7%	2.55	2.42	2.31	2.21	2.12	2.05	1.98	1.91
8%	2.71	2.57	2.45	2.35	2.26	2.18	2.10	2.03
9%	2.86	2.71	2.59	2.48	2.38	2.29	2.22	2.15
10%	3.00	2.85	2.71	2.60	2.50	2.41	2.32	2.25
11%	3.13	2.97	2.83	2.71	2.60	2.51	2.42	2.35
12%	3.25	3.08	2.94	2.81	2.70	2.61	2.52	2.44
13%	3.36	3.19	3.04	2.91	2.80	2.70	2.60	2.52
14%	3.47	3.29	3.14	3.00	2.89	2.78	2.69	2.60
15%	3.57	3.39	3.23	3.09	2.97	2.86	2.77	2.68
16%	3.67	3.48	3.32	3.17	3.05	2.94	2.84	2.75
17%	3.76	3.56	3.40	3.25	3.13	3.01	2.91	2.82
18%	3.84	3.64	3.48	3.33	3.20	3.08	2.98	2.88
19%	3.92	3.72	3.55	3.40	3.26	3.15	3.04	2.94
20%	4.00	3.79	3.62	3.46	3.33	3.21	3.10	3.00
21%	4.07	3.86	3.68	3.53	3.39	3.27	3.15	3.05
22%	4.14	3.93	3.75	3.59	3.45	3.32	3.21	3.11
23%	4.21	3.99	3.81	3.64	3.50	3.37	3.26	3.16
24%	4.27	4.05	3.86	3.70	3.55	3.42	3.31	3.20
25%	4.33	4.11	3.92	3.75	3.60	3.47	3.35	3.25
26%	4.39	4.16	3.97	3.80	3.65	3.52	3.40	3.29
27%	4.44	4.21	4.02	3.84	3.69	3.56	3.44	3.33
28%	4.49	4.26	4.06	3.89	3.74	3.60	3.48	3.37
29%	4.54	4.30	4.10	3.93	3.78	3.64	3.51	3.40
30%	4.58	4.35	4.15	3.97	3.81	3.67	3.55	3.44
31%	4.62	4.39	4.18	4.01	3.85	3.71	3.58	3.47
32%	4.66	4.43	4.22	4.04	3.88	3.74	3.61	3.50
33%	4.70	4.46	4.25	4.07	3.91	3.77	3.64	3.53
34%	4.74	4.49	4.28	4.10	3.94	3.80	3.67	3.55
35%	4.77	4.52	4.31	4.13	3.97	3.82	3.69	3.58
36%	4.80	4.55	4.34	4.16	3.99	3.85	3.72	3.60
37%	4.83	4.58	4.37	4.18	4.02	3.87	3.74	3.62
38%	4.85	4.60	4.39	4.20	4.04	3.89	3.76	3.64
39%	4.88	4.63	4.41	4.22	4.06	3.91	3.78	3.66
40%	4.90	4.65	4.43	4.24	4.08	3.93	3.79	3.67
41%	4.92	4.67	4.45	4.26	4.09	3.94	3.81	3.69
42%	4.94	4.68	4.46	4.27	4.11	3.96	3.82	3.70
43%	4.95	4.70	4.48	4.29	4.12	3.97	3.83	3.71
44%	4.96	4.71	4.49	4.30	4.13	3.98	3.84	3.72
45%	4.97	4.72	4.50	4.31	4.14	3.99	3.85	3.73
46%	4.98	4.73	4.51	4.32	4.15	4.00	3.86	3.74
47%	4.99	4.73	4.51	4.32	4.15	4.00	3.87	3.74
48%	5.00	4.74	4.52	4.33	4.16	4.01	3.87	3.75
49%	5.00	4.74	4.52	4.33	4.16	4.01	3.87	3.75
50%	5.00	4.74	4.52	4.33	4.16	4.01	3.87	3.75